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Ch

Gloeckner



**CHRYSANTHEMUM
MANUAL**

1961

*Fred C. Gloeckner & Co., Inc.
New York 10, N.Y.*



TERMS

The base price for each variety is listed with the variety. What you actually pay for each Mum cutting depends upon the amount of "earned credit discount" that you establish by:

1. The number of weeks your order is placed in advance of requested shipping date.
2. The number of cuttings you order for shipment within a 52 week period.
3. The promptness with which you pay the invoice for mums—within 28 days.

Discounts Effective January 4, 1960

Early Order—Prompt Payment Discount

The number of weeks an order is recorded in advance of shipping date.

If Order Is Received	Discount Will Be
Less than 4 weeks prior to shipping.....	2%
4-5 weeks prior to shipping.....	5%
6-9 weeks prior to shipping.....	6%
10-13 weeks prior to shipping.....	7%
14-17 weeks prior to shipping.....	8%
18-21 weeks prior to shipping.....	9%
22 weeks or more prior to shipping....	12%

THE EARLY ORDER—PROMPT PAYMENT DISCOUNT IS AVAILABLE WHEN INVOICE IS PAID WITHIN 28 DAYS.

Volume Discount

If you have ordered 10,000 or more cuttings during the 52 weeks prior to placing your order, the following firm discounts apply.

10,000	3%
30,000	5%
60,000	6%
100,000	7%
150,000	10%
210,000	13%

Inquire about the discount schedule above these amounts.

TERMS OF SALE

Fifty rooted cuttings of each variety is the minimum that can be supplied. More than 50 of a variety must be in multiples of 50.

Any changes or cancellation of chrysanthemum orders must be received at least 30 days before shipping date. Every effort is being made to deliver stock which is free from pests, but purchases must be made with the understanding that we assume no responsibility for losses which may result from same.

To facilitate deliveries, cuttings will be shipped on Monday and Tuesday of each week. However, we will gladly make shipment on Friday or Saturday, if specifically requested and provided the order is received one month prior to the requested shipping date.

WARRANTY AND LIMITATION OF LIABILITY: Subject to the limitations of liability herein set forth, we warrant that the seeds, plants or bulbs sold are as described on the container, within recognized tolerances. Our liability on this warranty is limited in amount to the purchase price of the seeds, plants or bulbs. In no event shall we be liable for the crop, or for any loss due to the failure, impairment or quality thereof or varietal variance therein, whether such loss results from breach of the foregoing warranty, from breach of any other provision of the buyer's contract for purchases of said seeds, plants or bulbs, or from any other cause.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Fred C.
Gloeckner
&
Company,
Incorporated

**15 EAST 26th STREET
NEW YORK 10, NEW YORK**

**Telephone: ORegon 9-6460-6461
Cable Address: GLOECKNERS, N. Y.**

BETTER CHRYSANTHEMUM CUTTINGS

WHAT YOU ARE BUYING

There are important "intangibles" in the chrysanthemum cuttings we are offering that you should consider carefully.

- 1) All our cuttings have been produced from cultured mother blocks.
- 2) Selection has been carefully made of the best clones in each variety.
- 3) Every effort has been made to assure true-ness to name of every cutting shipped.
- 4) Cuttings are selected for uniformity of size.

- 5) Rooting is done under the most sterile conditions practical and the cuttings are shipped at the right state of root development.
- 6) The cuttings are expertly packed and routed to assure the best arrival condition.
- 7) Varieties have been tested and specific cultural pointers are available so that you can produce a good crop first time.
- 8) The exclusive YGA varieties reflect the efforts of an expensive breeding program, and these varieties are made available to you at prices comparable with the older sorts.

AN ADDED INCENTIVE

Speaking of the YGA varieties, while this is fundamentally a marketing control, still it presents an opportunity for you to participate and profit in the search for newer sports—as suitable financial rewards are made to first finders of anything different in the Yoder developments.

HANDLING CUTTINGS

All cuttings are packed in specially designed boxes that provide the best environment possible while in transit. All cuttings are rooted in a light medium designed to provide optimum aeration and moisture for the root system.

Cuttings are sufficiently rooted to plant directly into their final location. Some protection in the form of temporary shade or light syringing may be desirable for the first four to five days, but this should be discontinued as soon as plants are turgid and new root growth is observed. If at the end of 48 hours the plants are not turgid during the morning hours and new white growth is not visible then one of the following factors is restricting growth: Roots are not receiving sufficient oxygen, as a result of the soil being too tight or cuttings planted too deep; roots are injured from fertilizer salts in soil as evidenced by browning or blackening of root tips; root system is not receiving sufficient water as a result of soil not being thoroughly watered prior to and after planting.

Since rooting and shipping tend to deplete the nitrogen in the cutting it is beneficial to water in the cuttings with a starter solution. Growers using a Fert-O-Ject may use the same solution as they use on older, established plants.

At the end of one week's growth the root system of actively growing plants should easily create a soil ball 6" square when held in your hands.

DELIVERIES

With the advent of the time pinch and precision method culture, it is necessary to have cuttings arrive on a definite date. To assure proper delivery, advance notice should be given the propagator. We would appreciate it if you could let us know your requirements early enough so that our propagator can plan his growing of stock plants and cuttings even more systematically.

Most often the propagator will follow the customer's suggested method of transportation. However, we encourage you to contact the propagator's transportation department should delivery problems arise.

DELAYS

With the reduced delivery schedule of the Railway Express Agency, there may be delays in delivering shipments. Chrysanthemum cuttings can be injured from cold as well as being too long in transit. If the cuttings are slightly wilted, they should be immersed in water for a short period and then planted. If the cuttings have been slightly frozen, place them in a cool room and thaw them out gradually. It is also possible to place them in a pail of cool water for a short period before planting. Of course, if stock is badly frozen, or if long delays have occurred so that the cuttings are heated, yellowed or rotted, a claim should be filed at once with the carrier. Air Freight and truck shipments have speeded up deliveries.

If the customer desires to have the propagator handle his claim with the claim department or the carrier he should mail to the propagator an inspection report signed by the local claim agent and by himself.

CULTURAL POINTERS

SOILS

The time taken and money spent in the cost of proper soil preparation should be considered the same as taking out an insurance policy on the success of your crop. Year-round growing has progressed to a degree of precision that will not permit the grower to have production losses due to factors he can control.

Maintain an open, well-aerated soil that drains well in addition to having some moisture-retention capacity. Periodic additions of organic matter to greenhouse soils is necessary for maintaining these desired properties that are associated with good soil management.

In order to achieve uniformity in soil it is necessary to add uniformly responding material. Of the various sources of organic material available German peat has been the most reliable form of soil additive. This is the result of the availability of a uniform grade, the slow rate of breakdown and the high degree of moisture retention it promotes in the soil. Other forms of organic matter can be used just as successfully but usually they require more study and effort to achieve the same results.

Caution should be exercised in the use of peat in soils that are naturally high in moisture retention. In cases where natural high soil moisture results in improper aeration, an inorganic additive such as perlite will be more effective in improving soil aggregation.

Greater care in soil preparation permits rapid penetration of water and air and a uniform supply of fertilizer. If water remains on the surface of your soil for more than a few moments after watering, the soil is not of good, open structure.

During the winter period, chrysanthemum plants are much more sensitive to overwatering and high soluble salts than during spring, summer and fall. When sterilization is arranged to just precede the planting for the winter crops, the results are best.

CHEMICAL STERILIZATION

Where steam is not available any of the following chemicals may be used to do a comparable job:

Methyl Bromide: Commonly called MC-2 is a combination of **Methyl Bromide** with 2% chloropicrin (tear gas) to act as a warning agent. It will give good control of nematodes, weed seeds and

certain fungi. Methyl bromide is not an effective control for verticillium wilt.

Larvacide-chloropicrin: Commonly called tear gas, it is effective on fungi, nematodes, weed seeds and soil insects, and will control verticillium wilt. Apply with a special applicator by plunging approximately 1½ to 3 cc. per square foot of area.

Vapam: A relatively new material that has been effective in the control of nematodes, soil fungi and weeds. Higher rates will give complete control while lower rates will control weeds.

Mylone: A new material that is applied in a pellet or liquid form and does not require rototilling. This material shows promise on outdoor crops.

Various combinations of the above materials are available such as **DOWFUME**, **PICFUME**, etc. All of these materials are toxic to man and growing plants, therefore, caution in their use is necessary. After applying these materials the soil must be covered for best results and a period of aeration prior to planting is a must to prevent injury or death of plants. Low soil temperature and excessive soil moisture frequently limit the use of these materials.

The actual job of steam sterilization is relatively simple, but it is the small steps leading up to the job done that can complicate matters.

Two weeks prior to removing the old crop start to leach the bench. All soluble salts can generally be removed with two or three good heavy waterings. It is much easier to do this when the old crop is still in the bench as it pulls the moisture from the soil. If excess soluble salts are not leached before steaming, serious trouble can result because steaming often releases chemicals that were not available prior to steaming.

The bench should be properly rototilled and the desired amount of organic matter added along with the necessary fertilizers **before** steam sterilization. Amounts of the various chemicals to add are:

(1) Treble Superphosphate	5 lbs. per 100 sq. ft.
(2) Calcium Carbonate (Ground Limestone) or Gypsum	10 lbs. per 100 sq. ft. 10 lbs. per 100 sq. ft.

Addition of above fertilizers is not always necessary nor desirable on soils that have been repeatedly fertilized and cropped. The bench should **not** be reworked after steaming because of the possibility of recontaminating the sterile soil.

CULTURAL POINTERS

STEAM STERILIZATION

The soil moisture level just prior to steaming is very important and is a point that is very sadly abused. Dry soil will not conduct heat efficiently and wet soil tends to condense excessive moisture. The soil should be in the same condition that is considered desirable in which to plant. This is called "friable" and means that after forming a soil ball in the hand that it can be crumbled with two fingers.

Moisture content of soil is important because of these reasons:

- (1) Heat combined with moisture does a better job of killing micro-organisms and weed seeds.
- (2) It takes less time to heat a moist bench than it does a dry bench. This is also the case with an exceedingly wet bed, where soggy benches almost take twice the time.

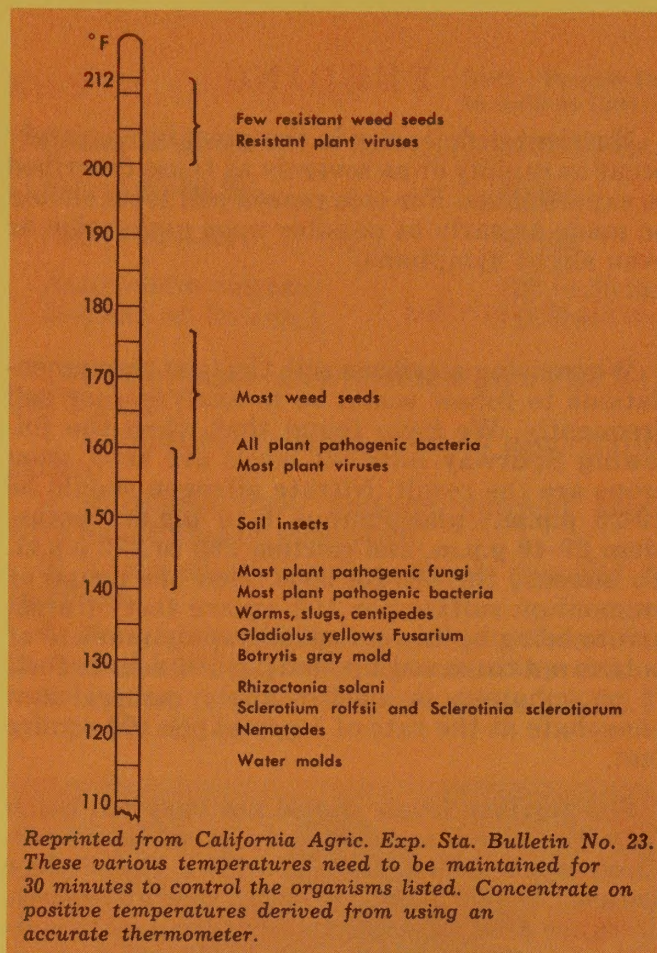
Large clods of soil should be broken so that the heat can penetrate to all areas uniformly.

Steam can be efficiently distributed to all sections of the bench simultaneously by the use of aluminum tubing 3" in diameter (with holes drilled in). Canvas hose with eyelets also works well. With both materials, two runs are recommended per 4-foot bench.

The soil should be held at the coolest spot to 180 degrees F. for 30 minutes, or when it first hits 200 degrees F. Be sure to use an accurate soil thermometer every time and **do not guess**. The steam cover should be removed as soon as the desired temperature is reached so that the excess steam can escape into the atmosphere without condensing in the soil. As soon as the soil is cool enough to handle, it is time to start planting—**THE VERY BEST TIME**.

Steam, in forcing its way down through the soil, creates millions of tiny pores which will remain for the life of the crop if undisturbed. It is therefore strongly recommended that soil not be rototilled or worked over again prior to planting.

When steam sterilizing, some growers use a plastic cover (not polyethylene) about 16 feet wide so that it can be extended to cover the aisles. This surface-steam the benches and bench supports. Instead of injecting steam into the end of the bench where there is danger of not reaching required temperature at the point of injection, it is suggested that the steam pipe be entered on the side about 8 to 10 feet from the end of the bench. A "T" is used whereby a 3/4-inch pipe directs the steam to the short end and the long end is equipped with a 2-inch pipe. By this means there is even distribution.



FERTILIZERS

Application

Chrysanthemums do much better right from the start if the soil is not too rich. Very often this crop will start off faster in new soil as compared to old soil that has been sterilized, just because of the lower nutrient level in new soil. When using new soil, apply 5 pounds of superphosphate per 100 square feet of area, plus a liberal application of organic matter before planting. Phosphorus moves slowly within the soil mixture. It should always be added before the crop is benched so that it may be mixed thoroughly into the soil. Liquid feeding with water-soluble fertilizers is fast becoming the popular method of applying fertilizer.

Water soluble fertilizers are available in many different analyses and therefore you can apply the fertilizer your soil requires. Many growers are feeding soluble fertilizers through their automatic watering systems. Remember to apply weaker solutions of fertilizer more frequently rather than heavy doses less frequently. When using complete fertilizers in dry form we usually figure on using two applications at 2 pounds per 100 square feet of area, starting shortly after the plants have started to grow and ending when the buds are visible. **Remember that the plant is the best guide to fertilizer requirements and that more mums are ruined by overfeeding than by nutrient deficiencies.**

CULTURAL POINTERS

FEEDING

Nutrient deficiencies in the greenhouse rarely occur as rapidly or as severely as those described in experiments. For this reason soil tests should be made as early as possible upon expression or even slight symptoms.

Levels of Nutrition

When using sterilized soil, the best recommendations to follow would be to analyze your soil frequently. We have found that when the following Spurway nutrient levels are kept, good crops are the result. **Nitrate nitrogen should be 10-25 p.p.m.; phosphorous 5-10 p.p.m.; potassium 20-40 p.p.m. and calcium 200 to 250 p.p.m.** To increase the nitrate level, feed one pound of ammonium sulfate per 100 square feet of area, and to bring up the potassium, apply muriate of potash not to exceed 1 pound per 100 square feet. If phosphorous is needed, apply monocalcium phosphate at the rate of 1 pound per 100 square feet.

Soil fertility levels should not vary too much from the above and where frequent liquid fertilizer applications, such as with a Fert-O-Ject are used, they will not. However, where dry fertilizers are used it is essential that timing of applications be made when they are most effective. There are three important periods in the normal growth cycle that require optimum levels of nutrition, and, to insure this, dry fertilizer application are timed accordingly:

- (A) Prior to pinching to insure sufficient nutrients to the new shoots arising from the pinch.
- (B) Prior to the beginning of lights-out period or black cloth application, to insure sufficient nutrients for bud initiation and development
- (C) Prior to the expression of color or shortly after the bud is plainly visible, to insure sufficient nutrients for color development in the flower.

It should also be remembered that flowers from deficient plants at the time of cutting do not ship well and have poor keeping quality.

In the cooler weather and shorter days of September, omit the nitrogen if the plants are growing freely. The mum assimilates more phosphorous and potassium during the time of bud initiation.

Soluble Salts

Soluble salts are chemical compounds consisting of an acid part (ion) and a basic part (ion). For example, common table salt, sodium chloride, consists of one ion of chloride and one of sodium. Chloride is an acid-forming ion, and sodium a basic or alkali-forming ion. The two

combine in chemically equivalent quantities to form a neutral salt. Other common acidic ions are sulfate, nitrate, bicarbonate and phosphate. Other common basic ions are calcium, magnesium, potassium and ammonium. Any basic ion may combine with any acidic ion giving rise to a great variety of salts.

All plant nutrients which are absorbed by plants from the soil or from culture solutions are absorbed in the form of salts or their constituent ions. All organic materials become "mineralized" through decay processes, and the nutrients in them are converted into salts before being absorbed by plants. Some salts contain plant nutrients and are beneficial in the small quantities required for plant growth. Others contain no nutrients. All salts are harmful beyond the small quantity required for plant growth. A little is bad, more is worse, up to the point where plants will be killed. Salts are found in most water and are applied as fertilizer. Improper watering may permit a concentration into the harmful range. Instruments called Wheatstone's bridges (Solubridge) are available which measure total soluble salts in terms of electrical conductivity or conductance. Many laboratories of the Agricultural Extension Service are equipped with Solubridge instruments for use in assisting with soluble salt problems.

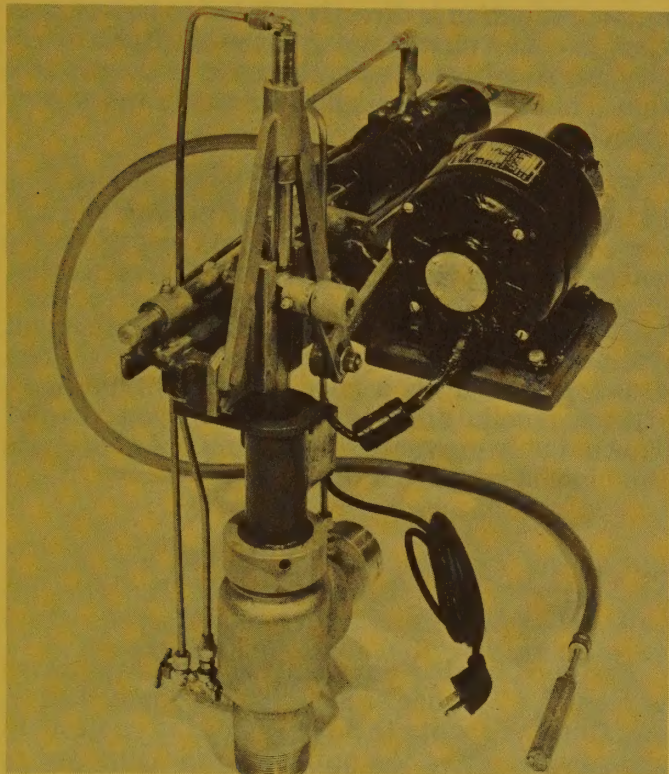
It has been found that **when planting rooted cuttings, the Solubridge readings should not be higher than 40**, while established plants do not withstand readings of 100 without showing some harmful effects. To remedy excess soluble salts, apply 2 to 3 gallons of water per square foot and leach out this high salt content.



GATES WATERING SYSTEM

CULTURAL POINTERS

FERTILITY CONTROL



MODEL E (Above)\$475.00

- CAPACITY
 - Standard Sleeve 5 to 120 g.p.m. (Ratio 200:1)
 - Low Flow Sleeve 2 to 60 g.p.m. (Ratio 100:1)
- Can be installed in water mains from 1¼ inch to 4 inch
- Permanent type installation—electric motor driven
- Fully automatic
- Recommended for ranges over 15,000 square feet.

Injection of small quantities of balanced fertilizer into existing water lines is now the most efficient way to produce top quality. This can be done most economically with FERT-O-JECT. Chrysanthemums, both pot plants and cut flowers, respond equally as well under this system. The theory behind this recommendation is that plants require fertilizer in direct proportion to the amount of water they consume. The more rapidly a plant is growing the greater the amount of water it receives and consequently the more fertilizer is applied. It is possible to feed diversified crops with the same fertilizer.

Kinds and rates of fertilizer used will vary with the region and type of soil, but the following can be used as a general guide where constant fertilization is practised.

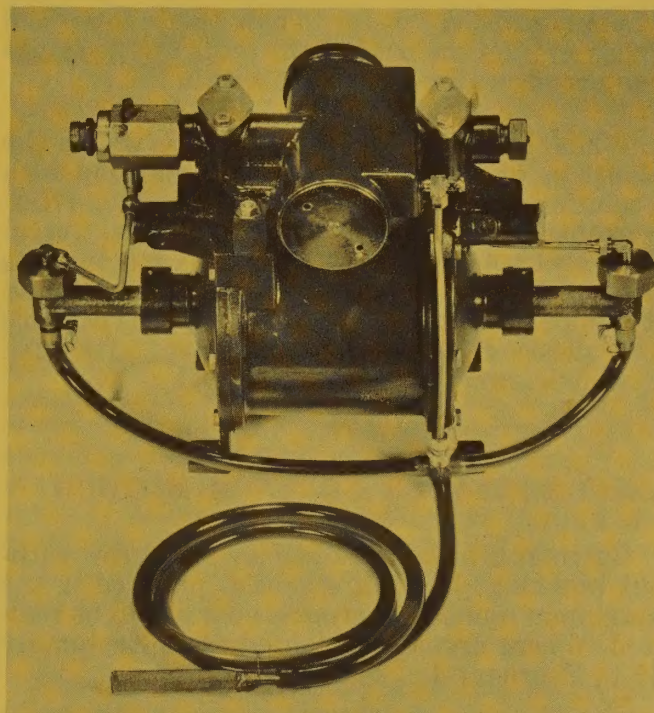
KIND OF FERTILIZER

Rate—Pounds Per
50 Gallons (200:1)

Peters 25-10-10	35 to 50 lbs.
Peters 20-20-20	50 lbs.
Peters 20-5-30	50 lbs.
Ammonium nitrate }	{ 25 to 35 lbs.
Muriate of Potash }	{ 15 lbs.

The advantages of fertilizing with a FERT-O-JECT are:

1. Eliminates the labor spent on hand fertilization.
2. Maintains more uniform nutrient levels with no burning or starvation.
3. Automatically applies proper quantity of fertilizer.
4. Inexperienced help can apply fertilizer with no fear of burning plants because of dry soil.
5. Applies fertilizer the way plants use it . . . a little bit all the time.



MODEL U-400\$300.00

- CAPACITY

Water pressure	20 lbs.....	12 g.p.m.
	40 lbs.....	17 g.p.m.
	60 lbs.....	21 g.p.m.
	80 lbs.....	24 g.p.m.
	100 lbs.....	28 g.p.m.
	140 lbs.....	32 g.p.m.
- Ratio—1:100
- Portable, but can be installed permanently into water main
- Fully automatic and self-lubricating.

PLANTING

PLANTING DATE

The proper planting date will vary according to the period of the year you desire to flower and the time permitted for growth of the plant prior to pinch.

Cuttings may be planted and allowed to flower without pinching. This is often used to improve quality. It also permits more crops a year from the same growing area.

PLANTING ROOTED CUTTINGS

When shipped all cuttings are active enough in growth and sufficiently rooted to permit planting directly into permanent locations. This method is recognized as being the most practical since it eliminates the check in growth commonly associated with transplanting. Never plant cuttings any deeper than they were in the propagating medium.

Apply sufficient water to new plants to set soil firmly around the base of the roots and to establish proper water movement within the soil.

When Rhizoctonia is a problem, water the plants in, or within one day after planting with a solution of 1 to 1½ pounds of Terrachlor (75% wettable powder) per 1000 square feet. Terrachlor will not eradicate Rhizoctonia but inhibits the ability of the organism to infect, therefore, it is important to treat plants as early as possible and questionable whether treatment after disease appearance is useful.

SINGLE STEM OR NO-PINCH METHOD

Cuttings are planted and allowed to grow without pinching. It is an essential practice if the maximum number of crops a year are to be realized. Where crops are planted from September 15 to February 1.

The no-pinch method produces a crop superior in uniformity of flowering and spray formation.

LIGHT INTENSITY

Newly planted cuttings should have some protection in the form of a temporary shade and several light syringings for the first five to seven days. It is questionable whether it is necessary to shade cuttings in air cooled greenhouses. After plants are established, a minimum amount of

shade should be used—never reduce natural sunlight over 36 percent for satisfactory growth. Further light reductions will necessitate an adjustment in spacing to produce a satisfactory crop. Research work has shown that chrysanthemum production is directly related to light intensity. In other words, the greater the light intensity, barring heat effects, the greater the production. This makes clean glass a must in the winter months.

For cloth houses, the amber Saran is superior to the green because of more light under the amber covering. Naturally the plants require more water when grown under higher light intensities.

Shade is recommended when flowers are about one-half open to prevent sun-burning. When growing standards, a good practice would be to stretch muslin directly above the open blooms. This not only prevents sunburning but also keeps the blooms free from dirt.

PLANTING DISTANCE FOR PINCHED CROPS

For good quality chrysanthemums, we prefer to plant 7 x 7 inches or 8 x 8 inches pinched once, and thin the shoots to 3 per plant. On vigorously growing varieties the outside rows will support one more stem than the center rows in the bed. Light intensity should be high at the base of the plant for quality blooms, and if planted too closely, we lose the factor which promotes quality.

PLANTING DISTANCE FOR NO-PINCH CROPS

Pompons	4 x 6 inches
Standards	5 x 6 inches
Fast Disbuds	4 x 6 inches (Summer)
Fast Disbuds	6 x 6 inches (Winter)



"HI-LITE" SPACING
IS NEWEST PLANTING
TECHNIQUE

PINCHING

Pinching in modern day chrysanthemum culture serves three functions:

(1) To produce lateral stems which can be flowered thereby reducing plant cost and enhancing uniformity in the crop.

(2) To determine the type of spray formation developed on pompons and singles.

(3) To determine the type of bud formation (crown or terminal), subsequent development and fullness of the flower, and the amount of necking of flowering stem on standards. Many factors affect the formation and development of buds on a chrysanthemum plant, one of which is the length of time a stem has grown prior to budding.

Experiments and field observations have shown that plants pinched too early produce early crown buds and the laterals developing as a result of this crown are usually long and uneven in flowering response. When plants are pinched too long after planting the lateral stem length is very short and the flower heads tend to be crowded together making an undesirable spray formation.

The schedules outlined in this book are designed to produce a crown bud which is surrounded by short-branched laterals that are in proportion to the over-all stem lengths and will flower uniformly.

Regardless of the time period between plant and pinch, **all pinches must be made into the soft growth.** Soft growth is most easily defined as growth that has occurred since planting that can easily be broken with a light twist of the thumb and fore-finger. Failure to pinch soft can often



MAKE SURE ENTIRE STEM
IS CUT WHEN PINCHING SOFT

result in low shoot count and retarded development of shoots. The result is often an uneven crop with poor production. Pinching into hard wood often disturbs the root system of the plant because of the force required to cut the pinch from the plant. Improper pinching can easily reduce the production potential.

PRUNING

If all the shoots that arise from a properly pinched plant were permitted to flower there would be little uniformity within the flowering stems, and many of the stems would not have satisfactory substance or strength to be of marketable value. In order to gain consistency in stems on pompons no more than 3 stems per plant should be permitted to develop on the inside rows of the bed and four stems per plant on the outside rows. If fewer stems per plant are desired the spacing may be decreased slightly but an average of 17 to 20 square inches per stem has been found most satisfactory.

Standards are usually grown two stems per plant with three on the outside rows. The most common error in pruning is waiting too long after pinching before selecting the correct number of stems. A decided check in growth results from delaying the pruning operation. Pruning late when shoots are hard and woody only serves to remove accumulated energy that could have been used to good advantage on the flowering stems. In addition, it usually leaves scar tissue which does not heal properly and may serve as a port of entry for disease organisms. The practice of stripping all leaves below the pinch level at the time of pruning is questionable. First, it removes potential food manufacturing organs, and secondly, it opens up avenues for disease entry.



REMOVE TOP 1/2 INCH OF
STEM WITH SHARP KNIFE

CULTURAL POINTERS

DISSPRAYING AND DISBUDDING

Disspraying: Vigorous growing, large-flowering varieties often produce side shoots below the main spray after bud set which should be removed to promote the best development and timing of the flowering shoot. These side shoots develop most heavily during the high light intensity periods of growing and in greater abundance on the outside rows of the bench. It has been found especially beneficial to remove these shoots on crops which are flowered under black cloth.

Removal of the center bud of the spray on many varieties of pompons will often assist in developing a more open spray. It also improves the keeping quality of the spray since the terminal flower is always older. In the Dot, Snowdrift and Pinocchio flower forms, maximum production will be attained only if all flowers are permitted to mature. Early removal of this center bud for maximum results is as important. Certain varieties during good growing conditions will initiate more buds than can develop into acceptable flowers. Removing part of the buds will improve the spray, timing, and increase the flower size on the remaining buds. On most varieties thinning to 4 or 5 buds per spray will produce higher quality flowers.

Disbudding: Varieties grown as standards or disbuds are grown so as to leave only one bud per stem. This is called "taking the bud." If you are growing according to the plant and pinch schedule given in the manual you will be able to take the first bud that appears. This is called a terminal bud.

TYPE OF BUDS

Terminal Buds: Terminal buds can be identified by the following traits: (1) A small, hard, central bud surrounded by a tight cluster of smaller buds all appearing similar and on a plane slightly

below the center bud. (2) Normal-shaped leaf development up to the point of budding. (3) Terminal buds appear only after continuous short-day treatment as indicated by either shading or termination of lighting period.

Crown Buds: Crown buds are characterized by the following: (1) A somewhat softer and usually larger bud, surrounded by vegetative shoots having only leaf buds. Vegetative shoots are on a plane above the central bud. (2) Leaf shape may appear abnormal next to the central bud, being usually narrower and somewhat strap-shaped. (3) Crown may appear on plants at any time but will occur most often on natural flowering crops from October to December.

The fact that crown-budding can occur at any time is an important clue to its origin and the condition responsible for its occurrence. It requires fewer number of days of correct day length to set the bud than it does to develop the same bud, therefore a crown bud only appears when the period was correct for **setting** the bud, but the environment was not correct for **developing** the bud.

Some actual cases where this might occur are: (1) Black clothing is not done consistently; too many nights skipped or poor-quality black cloth permitting too much light to fall on plants. (2) Lighting interruption caused by clock failure, or light leaking from an outside source interrupting the dark period. (3) Artificial light intensity inadequate outside or slightly shaded rows not receiving proper light intensity. (4) Failure to follow schedule and the growth from the pinch prior to lights out or black cloth shading was over twenty-four inches in length. (This is more likely to occur during the more rapid growing seasons of the fall and spring.)

In natural flowering of standards the following rule will assist in determining what to do with crown bud formation.

VARIETIES THAT FLOWER	REMOVE CROWNS THAT APPEAR BEFORE
Oct. 3 to Nov. 15	Sept. 5
Nov. 5 to Nov. 30	Sept. 26
Dec. 1 to Dec. 15	Oct. 3

Make the selection as early as possible to prevent the dog-leg appearance of the stem that develops from late selection on hardened stems.



READY FOR DISBUDDING



TERMINAL BUD
SURROUNDED BY SIDE BUDS

CULTURAL POINTERS

Final selection or disbudding timing is an important practice often overlooked. Selecting the bud too early, may cause injury if not done carefully. The more common error is late disbudding. This can appreciably reduce flower size, color intensity and could delay flowering by as many as 4 or 5 days.

PREMATURE BUDDING

Bud initiation can occur anytime during the spring months—whenever temperatures in the greenhouses are consistently 60 degrees F. or above, and the days are short enough to initiate buds. These conditions can occur anytime from Sept. 1 to May 1 depending on the variety and the locality in which they are grown. Some varieties, such as the garden varieties and 8 and 9-week varieties, require very little short-day treatment, coupled with high temperatures, to initiate buds. This same tendency to set bud readily is what makes these varieties desirable for early shading and garden work. In order to prevent this premature setting of buds, these same varieties should be placed where they can be given additional light during the early spring months. Use 60-watt bulbs spaced 4 feet apart and 24 inches above the plants. Three hours of light during the middle of the dark period will prevent budding completely if the minimum intensity is 8 foot-candles. The same treatment on either end of the night might not be so effective during cloudy periods which create a shorter day.



Shading an entire house in one operation.

FAILURE TO BUD—(BLINDNESS)

Temperature is associated with blindness. When plants are grown below 50 to 55 degrees F. during the bud initiation period many varieties will produce blind growth. In "Year-Round Flowering" we have found that chrysanthemums should be grown in a 60-degree temperature to insure good bud development. Although there are some varieties which require a higher temperature, and there are other varieties that will initiate buds at a lower temperature, it is safe to recommend a 60-degree temperature in most cases.

In the case of a short-duration low temperature emergency the question always arises as to when does most damage occur? Experience with cloth house operations has shown that the most critical time in regard to loss of production is in plants that have been under a lights-out condition for three to four weeks. At this stage of growth, failure to give adequate protection can make the difference between critical injury to the bud resulting in complete blindness and malformation of flowers. Stages of growth after this will be affected but not so often to the degree stated above. In conjunction with the above statement it should be noted that extreme fluctuations in night temperature above 65 degrees F. and below 54 degrees F. on winter crops after the bud is visible can cause serious delays and malformation of the bud. For best results, when finishing plants cool do not lower the temperature in more than 2-degree intervals over a 5 to 7-day period.



A two bed unit enables one person to handle black cloth. Lighted units can also be shaded in a flowering house.

CULTURAL POINTERS

SHADING—PETAL BURN

When blooming chrysanthemums during high temperatures and high light intensity, it is advisable to cover the beds with a cheese-cloth stretched about 18 inches above the top of the developing blooms. This covering will also help keep dirt off the open blooms. Sunburn sometimes is confused with flower ray blight, which is caused by Botrytis. Botrytis is more abundant during periods of high humidity and low temperatures.

Adequate moisture at the roots will help prevent petal burn during the hot summer days.

SUPPORTS

With higher labor costs, it has become necessary to eliminate some of the labor in supporting standards and disbuds. The old way of supporting with stakes or stringing each plant has given way to the welded box-wire or cross-string method of support. Turnbuckles placed near the ends of the beds will keep the wires much tighter. Most growers are only using one layer of wire and cross strings and are gradually raising it as the crop grows.

Pompons are usually supported by the string and wire method similar to that described above.

Production losses because of failure to support the plant sufficiently or soon enough are not uncommon. Growth that is not vertical is often thin, weak and produces small leaves as a result of the excessive shade it receives. This type of growth even when supported properly will not produce satisfactory flowers. In cloth-house culture it is very important to maintain the wire supports as close to the flower head as possible at all times to prevent breaking of the flower stem under the weight of moisture accumulation and wind pressure.

CUTTING FLOWERS

The outside rows of the bench will usually flower two or three days before the center rows. Flower stems are considered marketable when the most advanced flower is completely open but not reflexed on the outer edges, unless that is a variety characteristic. Pink and Bronze varieties

are often cut sooner during high temperature periods to retain maximum color. The lower one-third of the stem is stripped of foliage to aid in bunching, packing and to prevent odors of decomposition from leaves when placed in water.

Place cut flowers in clean, room-temperature water as rapidly as possible after cutting. Wilted flowers may appear to take up water prior to packing, but frequently complaints of failure to absorb water upon receipt can be traced to the failure of tighter flowers to open uniformly, even though stems are in water. Standard varieties are ready to cut anytime after the tight center petal swirl disappears. Normally 5-7 days is a satisfactory time period for cutting out a particular variety. If more time is required it is desirable to review all cultural techniques.

SHIPPING FLOWERS

Packing of cut flowers should be carefully studied. The most common error is over-crowding in the shipping boxes.

It should be remembered that cut flowers will continue to grow and expand in size during transit, therefore, tightly packed boxes at departure time will be very tight upon arrival.

Quite often flowers from over-packed boxes have poorer keeping quality. This reduction results from bruised and crushed flower petals. Buyers complain that they cannot use the flowers without holding them in water for an extended period to regain turgidity in the crushed flowers.

Not securely fastening the blooms in the box will cause bruising of the petals. Cleating or sewing the stems to the box is essential. Cushion the blooms by placing enough padded paper at the bottom of the corrugated box and between the layers of blooms. In order to give complete protection pompon bunches should be wrapped so that the paper extends 1 or 2 inches above the flower heads. Chrysanthemum "Saf-Pak" is very helpful in shipping standards to market. One dozen blooms are held securely in one "Saf-Pak" holder.

Long-distance shipments carry better if the cut flowers are packed dry. Reduction of the temperature is accomplished by precooling the packed cut flowers. Never ship wet flowers.

YEAR-ROUND FLOWERING OF CHRYSANTHEMUMS

Basic research of Garner and Allard of the U.S.D.A. in 1920 established the fact that length of day affected the time of flowering and growth of plants. Practical application of this fact to year-round chrysanthemum culture was developed chiefly by Alex Laurie, Gus Poesch, Kenneth Post, and commercial plant propagators.

The basis for year-round or controlled flower-

ing of chrysanthemum rests on the fact that the chrysanthemum plant will develop flower buds only under a continuous dark period of more than 10½ hours. Shorter periods do not prevent growth of the chrysanthemum plant. In year-round flowering the length of the days is adjusted either by artificial illumination or by the use of Black sateen cloth, to produce the particular growth response desired.

YEAR-ROUND FLOWERING OF CHRYSANTHEMUMS

All varieties are classified according to their response; more particularly to the length of time required for flowering when exposed to the correct continuous dark period. This is called "Response Group." For example a 10 week response variety requires 10 weeks to flower after the correct continuous dark period has been started.

Varieties are sometimes listed under normal Flowering Date. This classification is based on the date the variety normally flowers in the 40-45 degree latitude. Flowering in this case is the result of the naturally occurring long nights as fall and winter approach, hence the term, "natural Flowering Date." It is simply a guide from which to calculate the flowering date in other latitudes.

Lighting

Artificial illumination is used to provide sufficient stem length during periods of the year when the natural darkness is long enough to start bud initiation. To prevent budding the dark period is then reduced to no more than 7 continuous hours by lighting the plants three to four hours each night, starting no earlier than 10:00 P.M. The light intensity must not be less than 7 foot candles when measured at plant tip on most varieties and no less than 9 foot candles when used on seven and eight week response varieties.

To achieve the above the following rules have been developed:

(A) 11¼ watts of light per square foot of growing area including walk space are required.

(B) On single 42 to 48 inch benches use 60 watt lamps, with reflectors, spaced 4 ft. apart, 2-3 ft. above the tops of the plants.

(C) For two adjacent benches 42 to 48 inches wide, use one line of 100 watt lamps with reflectors, spaced 6 feet apart and 2 to 3 feet above the tops of the plants.

(D) For best response do not start lighting before 10:00 P.M.

(E) Light for 3 hours during the months of August, September, October, March, April and May.

(F) Light for four hours during the months of November, December, January and February.

The above is meant to be a guide and may be modified according to Latitude. Consult the local Sunrise and Sunset tables for the hours of continuous darkness and modify as needed.

Shading

During those periods of the year when the natural continuous dark period is not long enough for budding it is necessary to shade the plants, after sufficient stem length has occurred. To produce the desired dark period, a durable Black cloth (Sateen) which will reduce the light intensity to 2 foot candles or less, when applied at

5:00 P.M., is used for this purpose. The cloth should be applied at 5:00 P.M. and removed at 8:00 A.M. Shading when temperatures are 90 degrees or above have been found to delay flowering. Shading should be delayed until air temperature is below 85 degrees if possible, but shade must be applied for 12 continuous hours once it has begun. The cloth must be placed on the plants every night. (For every day skipped, an additional day's delay in flowering will occur.) The only addition to this rule is in cloth house production, where rain storms may prevent cloth application. Continue covering each evening on pompons until the latest buds show color and most of the flowers are well developed. For large flowering varieties, shading may be discontinued after all flower buds have attained the diameter of one half inch. Change position of folded cloth from day to day to prevent weak growth, due to the shadow falling on the same plants.

Excessive high temperatures prohibit the bud development, and during seasons of 90 degree afternoon temperatures, it is suggested that the black cloth be raised after twilight and lowered again in the morning before daylight. This cooler temperature hastens the development of the buds. Air conditioning greenhouses has made it possible to grow chrysanthemums in locations where natural high temperatures prohibited the development of this crop.

Temperature Control

For inter-connected units or crops at different stages of development the most efficient and effective temperature recommendations we can make are **cool 60 degree crops**. The house temperature is run at a straight 60 degree level night and day, cloudy or sunny. This is the lowest, safest minimum. It is the night temperature that counts. Eliminating fluctuation promotes steady, gradual growth. Keeping day temperatures down encourages more ventilation with corresponding reduction in relative humidity. This promotes stronger, heavier stems. On very bright days temperatures will frequently go higher but this should be due to radiant heat from the sun rather than convective greenhouse heat.

Selection and Varieties

The careful selection of varieties in year-round flowering is very important. An intimate knowledge of varieties will eliminate the pitfalls associated with this crop. Knowing how to select varieties on the basis of response groups is equally as important as selecting varieties that will respond out of season.

In latitudes where seasons, temperatures and light conditions are variable, it is to any grower's advantage that he grow only those varieties that will provide the highest yields and best quality for each period of the year.

YEAR-ROUND FLOWERING OF CHRYSANTHEMUMS

The South is of course more fortunate in that light duration there and intensity fluctuates less than is experienced in the North, and even though only three or four response groups are used during a 52-week period, the need for meticulous varietal planning is just as important as

it is for any one period in the North.

Your Gloeckner representative is well equipped to furnish you the details and the proper varieties for each particular flowering date. His intimate knowledge will eliminate the guess work associated with mum programming.

INTERRUPTED LIGHTING FOR WINTER STANDARDS

When flowering December thru March crops of the standard varieties Indianapolis, Queen's and Mefo's the use of interrupted lighting has been tested and is recommended as a means of increasing petallage. This materially improves the appearance of the flower reducing the effect of decreased petallage and quilling known to be associated with abrupt shade during the short days of the winter period.

The essential requirements are:

1. Units planted to only the above mentioned varieties. The procedure has not been thoroughly tested on spray varieties or other standard varieties.
2. Accurate control of temperature. A 60° minimum night at all positions within the unit plus correspondingly higher day temperatures. Cloudy days were run at the 60° minimum. Bright days were between 65°-70°.
3. A rigid adherence to scheduled timing recommendations with interruption.
4. No extreme temperature reduction at or near the finish of the crop. Low temperature is known to be partly responsible for an increase of quilling in the Indianapolis varieties. A minimum of 55° is satisfactory only after buds show some color.
5. The method recommended is as follows:

For any given crop to be flowered during the **December through March** period determine from the schedule the date lights are stopped. Count back twelve (12) days and on this date start and maintain nine (9) continuous short days of no lights. At the end of this nine (9) short day period run twelve (12) continuous days of lights on. Then turn lights out and maintain normal short days.

Thus the total number of long days as called for by the schedule remains the same. This second long day period immediately following the first short day period of nine (9) days serves to slow down the early bud development stage resulting in a petallage increase of approximately 50%.

To illustrate: For flowering Indianapolis White (10 week) for December 11 the schedule calls for October 3 lights out. Counting back twelve (12) days gives September 19. Therefore run short days from September 19 to and including September 28 (9 continuous short days). Starting September 29, run twelve (12) long days to and including October 10. On October 11 start the final and continuous short day period. This is the nine (9) short day—twelve (12) long day formula for interrupted lighting.



ALUMINUM FOR LIGHT REFLECTOR



CANVAS HOSE WITH STAND FOR HOLDING DOWN TARPAULIN

INSECTS AND THEIR CONTROL

APHIDS, OR PLANT LICE

All aphids are true sucking insects that insert their beaks through the surface of the leaf or stem and extract the juices from within.

Injury. The feeding of aphids causes the plants to become sickly and stunted. The leaves curl inward, and when the flower terminal is infested, the blooms will be deformed. Certain varieties of chrysanthemums are more susceptible to attack than others.

Control. Nicofume Fumigation is an easy method of controlling the black aphid but will do very little to control the green or straw-colored aphids. Lindane or Parathion is much more effective on the very resistant green or straw-colored aphids. Vaportone is also effective when used at higher concentrations. Thiodan and Malathion will also control aphid and spider mite, with special attention being centered currently on Thiodan as probably the most effective aphid control.

CHRYSANTHEMUM LEAF MINER

The larva or maggot disfigures and weakens chrysanthemum plants by mining in the leaves. It may do considerable harm to the crop, but is easily held in check.

Injury. The young maggots burrow in the leaf tissue, leaving the upper and lower surfaces intact. The tunnels are irregular and winding. White blotches are thus formed, which later turn brown, and the leaves may die.

Control. As soon as it is noticed that any leaves are infested, they should be picked off. Parathion or TEPP aerosol bombs or sprays containing Lindane, Chlordane or Parathion, are very effective.

CHRYSANTHEMUM MIDGE

The chrysanthemum midge, although seldom seen today, can be one of the most serious pests

with which the grower has to deal. Under optimum conditions, a little over a month is required to complete the life cycle from the egg to the adult. The eggs are reddish-orange in color and are usually deposited on the tender tips of the growth. Under favorable conditions, the eggs hatch in about three days. The larva wanders about over the surface of the leaf for a day or two before finally penetrating into the leaf.

Injury. The midge attacks all parts of the plant but prefers the tender growth. If the infestation takes place when the plants are small, they fail to grow, although if the plants are well-developed when the infestation starts, the buds blight or are deformed, and the plant is rendered unsaleable.

Control. Lindane is effective against young and adults.

Parathion aerosols effective, but require frequent applications.

DDT effective against adults—repeated applications necessary.

CORN EAR WORM

The corn ear worm is a green to brown, nearly smooth caterpillar often mistaken for a cutworm when found within the buds or on the open flowers.

Injury. It is very destructive to the opening buds, for it feeds on their petals and other parts, deforming if not entirely ruining the flowers.

Control. If the attacked plants are blooming, spraying is out of the question, but thorough treatment with a 3 or 5% D.D.T. dust is recommended. After they have worked their way into the buds and are found to be feeding on the open flowers, hand-picking is the only remedy. Spraying the plants with Deenate 50W will control them before the color shows. Parathion fumigation will also keep them under control.



Corn Ear Worm Damage



Leaf Tyer



Mealy Bugs

INSECTS AND THEIR CONTROL

CUTWORMS

The larva is dull colored and from one to more than 2 inches in length. They are most active at night, and usually spend the day coiled up just under the surface of the soil at the base of the plant. They should not be confused with the corn ear worm, which cannot be controlled by poison baits.

Injury. Cut worms obtain their food by biting out sections of the leaf, stem or bud. Various species attack different parts of the plant. The one that is most damaging climbs to the top of the stem and eats into the flower buds.

Control. Those cutworms that feed on the foliage can best be controlled with **Deenate 50W** spray using 1½ pounds to 100 gallons of water. **Parathion** has been suggested as a good control measure and is more effective as a spray.

GREENHOUSE LEAF TYER

It gets its name from its habit of spinning light webs inclosing 2 or more leaves or tying together the parts of a single leaf. This caterpillar is very active, and when disturbed, will wriggle off the leaf, often backwards, lowering itself on a silk-like strand.

Injury. When first hatched, the larvae eat out shallow holes on the under side of the leaf. As they grow, they enlarge these holes but usually do not cut through to the upper surface. The result is that the leaves become skeletonized.

Control. The best poison to control the larvae is **Deenate 50W**, either in the form of a dust or a spray. For liquid spray use 1½ pounds of **Deenate 50W** to 100 gallons of water. Regular fumigations with **Parathion** will keep the leaf tyer under control. **Malathion** is also effective.

MEALY BUGS

Mealy bugs are small, sluggish, whitish, soft bodied insects, measuring up to one-quarter inch long, found in clusters on the undersides of the leaves or in the leaf axils.

This pest sucks the juices from the stems and leaves, discoloring and deforming the foliage.

Control. **Parathion** or **Dithio** are the most effective. Repeated applications necessary.

MITES

Cyclamen mite and broad mite are often found on the same plants at the same time. Broad mite could pass through a complete generation in 4 to 5 days at 70 to 80 degrees, while the cyclamen mite will take 4 to 5 times longer.

Injury. Infested leaves become deformed, curl from the outside inward, and wrinkle so that pockets and pit-like depressions are formed. When the infestation is severe, the mites collect about the buds causing them to blight. Oftentimes white varieties will show occasional red petals.

Control. Endrin at 1-400 with DuPont Spreader Sticker 1-2000 gave excellent control. **Kelthane** also is effective. **Systox** used as a soft drench has been found effective in mite control. **Thiodan** is effective.

RED SPIDERS

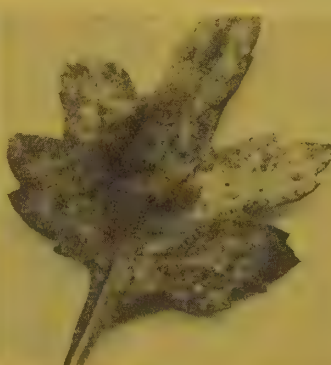
There are several species of red spiders that attack the chrysanthemum. They vary in color through yellow, orange and red. The body is oval in outline and bears 8 well-developed legs.

Injury. Red spiders pierce the epidermis of the leaf and draw the liquid contents from the cells, causing the leaf to turn pale around the injured portion. They prefer to collect on the under surfaces of the leaves, which they cover with silken threads.

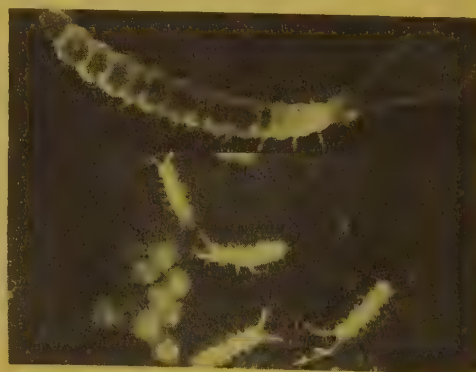
Control. **Aramite**, **Chlorobenzalite**, **Tedion**, **Kelthane**, **Parathion** or **Malathion** spray or **Aramite**, **Chlorobenzilate**, **Dithio**, **Parathion** or **Malathion** bomb. P40 at 3 pounds per 100 sq. ft. after plants are well established; especially desirable for cloth house operators, will also control foliar nematodes. **Plantfume 103** smoke generators and **Fulex Parathion Fumigators** are simple to use and very effective. **Dithio** is much safer than other insecticides when used on open flowers. Alternating the insecticides will very often give better control.



MITES INJURY



RED SPIDER INJURY



SYMPHYLID. ABOVE, ADULT —
BELOW, EGGS AND YOUNG

INSECTS AND THEIR CONTROL

SYMPHYLIDS

Symphylids are small white creatures about one-eighth to three-sixteenth inches long. About 40-60 days are necessary for the completion of the life cycle.

Injury. Symphylids destroy the fine root hairs and small rootlets, thus stunting the plants and often killing them outright.

Control. Complete control can be obtained with **Lindane** applied to the soil. **Lindane** can be applied to the surface of the soil either as a dust or as a wettable powder in a convenient amount of water. Application can be made when plants are in the bed, but best results are obtained if the insecticide is worked into the soil prior to planting. Use **Lindane 25W** at the rate of 8 ounces per 1000 ft. or 1% **Lindane** dust at the rate of 10 pounds per 1000 sq. ft.

SOWBUGS

Injury. Sowbugs often become so plentiful in the greenhouse that they eat the newly-planted cuttings at the base.

Control. Any of the many poison baits will give partial control but a complete spraying with **Deenate 50W** under the benches has given excellent control.

TARNISHED PLANT BUGS

The tarnished plant bug or sting fly comes into the greenhouse through open doors and ventilators in late summer or early fall and does considerable harm to this crop. Chrysanthemums growing in the open are frequently affected. Varieties such as Mary L. Hall and Sea Gull are attacked to a greater extent than other varieties.

Injury. It has sucking mouth parts and obtains its food by inserting its long, slender beak into the plant tissues and sucking up the contents of the injured cells, apparently injecting saliva, which causes the death of the tissue in the immediate vicinity. The stem is often slightly bent, and the terminal growth is malformed because of this injection.



TARNISHED PLANT BUG



THRIP INJURY



ADULT ONION THRIP

Control. Early morning spraying or dusting with any of the pyrethrum materials will kill those bugs that are present but this will have to be done each day for complete eradication. **Dieldrin** and **Malathion** have been giving fair control, but again these insecticides are best used as a contact. **Parathion** fumigation will control this insect in the greenhouse.

TERMITES

Termites are not ants, though often called white ants. The food of termites is wood or cellulose. Soil inhabiting forms are the most common in the greenhouse.

Injury. Termites sometimes injure chrysanthemum plants by working up the center of the plant and hollowing out the stem. This injury will eventually kill the plant.

Control. Clean up all wood debris in soil. Replace old wooden benches. Keep wooden bench supports from direct contact with the ground.

THRIPS

The chrysanthemum is usually attacked by one or more species of thrips. These small, narrow-bodied, active insects which range in color from yellow to brown or almost black, injure both the leaves and the blossoms.

Injury. Thrips have mouth parts that are fitted for piercing and scraping the leaf surface and for sucking the juices and other cell contents. The upper surface of the foliage is covered with whitish blotches, while minute black specks appear on the lower surface. Thrips are capable of causing severe injury within a short time.

Control. **Deenate 50W** used at the rate of 1 pound to 100 gallons of water is a very effective control. Other insecticides containing **Lindane** are also recommended. **Parathion** will control the chrysanthemum and onion thrips. Regular dustings or spraying are necessary where infestation is heavy. **Dieldrin** is also very effective.

DISEASES AND THEIR CONTROL

MILDEW

Symptoms. Whitish powdery growth on upper surface of leaves.

Control. Spray at regular weekly intervals with a good wettable Sulfur, 1½ pounds per 100 gallons of water to which a good commercial spreader has been added. Spray with Mildex 4 ounces per 100 gallons of water plus spreader whenever disease appears.

BACTERIAL WILT OR STEM ROT

Symptoms. Plants in all stages of growth may exhibit symptoms. In newly-planted cuttings it first appears as early wilting. Examination of cuttings will show the stems to be filled with a soft jelly-like, often red-colored mass. Stems may crack open in later stages and as the soft jelly dries it leaves the stems hollow. Break-down of the infected plants may start at the location of a pinch and work down and out into breaks from pinch. Complete loss of the plants is not uncommon. In most cases, plants will wilt at some stage of the disease's progress causing the growth to be retarded, but it is possible for wilting to occur as late as flower opening.

Control. Remove and burn immediately all affected plants. Avoid pinching wet plants to prevent spread of the bacteria. Since it is a disease that attacks soft tissue during rapid growing periods of the year avoid excess use of ammonium fertilizers. Avoid dipping cuttings. Exercise care in variety selection for this period whenever possible.

BASAL STEM ROTS

Symptoms. One of the disease is accounting for a high loss of plants and production during the high humidity, high temperature periods of growing. One of two fungi are involved:

(1) **RHIZOCTONIA:** May be distinguished by the following:

(A) The decay originates near the soil surface rather than in the root system;

(B) The diseased area has a brown coloration from the branches of the organism;

(C) Strands of mycelium can be seen with a hand lens;

(D) Where plants are crowded such as in a propagating bed or container the fungus can form a strong, brown-colored web over the plants, and

(E) The expression of the disease is often rapid and may rot mature plants upward from an infection at soil line.

(2) **PYTHIUM:** May be characterized by the following symptoms:

(A) Rotting may start at the root tips;

(B) Does not produce a characteristic color; roots will be brown and black depending on the various stages of decomposition. Rapid blackening of stem on actively growing plants is not uncommon;

(C) May destroy the root system slowly causing a slow retardation in growth; and

(D) In almost all cases the root system has stood in water for some time.

(E) May be spread by pinching, causing death of plant from pinch, down to soil line.

Field observations often reveal both **Pythium** and **Rhizoctonia** attacking the plant at the same time. Spread of the organisms is through transfer of plants, tools and soils. Next to poor soil aeration and inadequate drainage, high salt concentrations are known to increase the severity of expression. The most severe symptoms of the disease are usually found on the beds having an uneven soil surface permitting surface water pockets. In ground beds of a cloth house the greatest incidence will be found in that part of the bed where surface runoff flooding was permitted. In both cases the excess of water seals the soil and provides conditions favorable for both diseases.

Physical Control. Supply better than just adequate drainage for all beds. Time taken in soil and bed preparation is money spent on insurance towards the success of your crop. In cloth houses slightly raised beds aid in preventing flooding and provide additional insurance for proper aeration where you have no control over soil moisture. Remember, these diseases can be transferred from diseased areas to new areas on any type of equipment or tools and by pinching.

Chemical Prevention. Broadcast **TERRACHLOR** (75% wettable powder) at 2 pounds per 1000 square feet before planting and mix thoroughly into the top 2 inches of soil. This may also be used as a soil drench prior to, or at any time of planting. Use **TERRACHLOR** at the rate of 2½ pounds per 300 gallons of water and apply to 1000 square feet of bed area. It should be recognized that this treatment is not a control for plants expressing symptoms but a preventative treatment.

DISEASES AND THEIR CONTROL

FLOWER ROTS

(1) RAY BLIGHT

Symptoms. Caused by a fungus, *Ascochyta chrysanthemi*, which may attack any part of the chrysanthemum plant during its normal growing cycle. The name RAY BLIGHT is derived from the fact that noticeable expression is most often on the ray florets of a developing flower.

(A) Petals on one side of the flower turn dark brown or black from their base outward and tend to stick together.

(B) Rot may progress down the flower stem.

(C) Blossom falls apart.

(D) The leaves and unopened buds also may be attacked, producing a mushy, black-brown spotting and rotting under continued moist and moderate temperature conditions. The rot may extend from the leaves into the stem causing a brown to black lesion which may eventually girdle the stem and cause death at the top of the plant. In severe causes rot will weaken the stems sufficiently to permit flopping over of the flower heads.

(E) The infected leaf tissue may resemble Septoria leaf spot but it is usually distinguished by the lack of circular spot pattern common to Septoria and the presence of yellowing of tissue next to an infection of *Ascochyta*.

The fungus can withstand extremes of temperature and moisture and can lie dormant for prolonged periods and yet be destructive when reactivated.

Control. When the crop is finished, thoroughly clean the growing area and destroy all chrysanthemum tissue collected. Once the fungus infects the flowers no applications of fungicidal sprays can stop the disease, therefore it is essential that a regular prevention program be followed. Lower the humidity as much as practical and spray on a regular schedule until buds show. At bud appearance alternate spraying the flower from below and above using PARZATE and ORTHOCIDE 50W at one ounce per 4 gallons of water plus one-third teaspoonful of DuPont spreader-sticker. This should be repeated at no less than 5-day intervals. In cloth houses rains should always be followed with sprays regardless of frequency. However, if frequency is occurring closer than

5-day intervals reduce the quantity of spray material and the spreader sticker to $\frac{1}{2}$ the regular rate. During periods of excessively high humidity additions of MANZATE $\frac{1}{2}$ lb. per 100 gallons of water also has been effective. There is some evidence to show that CAPTAIN (ORTHOCIDE 50W) will produce fading of open flowers more readily than Parzate. Fading of flowers also has been reported by growers when excessive use of stickers and spreaders has been permitted.

(2) BOTRYTIS

Symptoms. The organism may attack any part of a chrysanthemum plant during its normal growing cycle and frequently cause the greatest losses on mature flowers in transit. Expression of the disease varies considerably from *Ascochyta*.

(A) It does not attack the flower bud from the inside and is usually found on a more mature or fully-opened flower.

(B) Foliage infections are characteristically soft brown and upon drying do not have any distinguishing features.

(C) Botrytis is found most often on the foliage shaded in the center of the bench.

(D) Mature infections will produce visible threads of mycelium that upon drying are white in color.

(E) The organism most readily attacks injured tissue such as that burned from excess of fertilizer and sunburn.

Control. Reduce the quantity of free water that stands on flowers and foliage as much as possible. Do not ship moist flowers.

Spray regularly with PARZATE and ORTHOCIDE 50W at same rate and frequency used for *Ascochyta* control. CM19 may also be used as a foliar spray. CM19 has been successfully used as a Botrytis eradicator when applied frequently to Botrytis susceptible, lower foliage of the plants at the rate of one pint per 100 gallons of water.

RUST

Symptoms. Chocolate brown powdery pustules on lower surface of the leaves.

Control. PARZATE, one ounce to 4 gallons of water is most effective.

DISEASES AND THEIR CONTROL

SCLEROTINA

Symptoms. The organism is easily recognized by the dense, white wet-appearing, cottony mass-like growth in which are found hard black seed like sclerotia. Under field conditions air-borne spores develop and subsequent infection makes it more difficult to control. Expression of the disease is rarely seen on greenhouse chrysanthemums and then only when poor regulation of temperature and humidity prevail. Under cool, moist, often prolonged foggy periods in the field it will attack mature, healthy plants and cause death of plants through wilting.

Control. Ventilate properly. Remove the infected plant material and burn. Spray lower foliage with **TERRACHLOR** at the rate of 1½ to 2 pounds to 100 gallons of water. Be careful to clean up and burn all crop residue. Hard sclerotia are able to reinfect plants years after the initial infection.

SEPTORIA LEAF SPOT OR LEAF BLIGHT

Symptoms. Distinct circular spots on the foliage. These are grayish-brown in color and become brittle in the center. Affected leaves may turn yellow and die. The disease is more prevalent in the open. Some varieties are more susceptible than others. The variety, Sea Gull is very susceptible.

Control. When cuttings are received, dunk the tops into **FERMATE** (2 tablespoons to a gallon). Spray the plants with **PARZATE** at the rate of one ounce to 4 gallons of water plus one-third teaspoonful of **DuPont spreader-sticker** every 10 to 14 days. Cloth house mums should be kept covered until the buds can be seen.

VERTICILLIUM WILT OR SEIDEWITZ DISEASE

Symptoms. Margins of leaves turn yellow and eventually wilt or dry up. This begins at base of plant and works up the stem. May affect one side of a stem or plant more than the other. No distinct spots. Varieties vary in resistance to this disease.

Control. Verticillium wilt can be avoided by purchasing our disease-free cuttings produced from cultured stock. It is also necessary to plant only into sterilized soil. Steam and MC2 only known effective soil sterilants.

VIRUSES

The word "virus" is being referred to by the medical profession as well as by the florists, and a short explanation of virus should prove of interest.

Viruses of the chrysanthemum are considered to be infectious; that is they can be transmitted to a healthy plant only by contact with an infected plant. They are not carried in the soil, water or air as are other diseases caused by fungi and bacteria.

The virus particles cannot be seen by the most powerful microscopes. Most of them will pass through bacterial filters. They respond like living organisms. They are always present in the sap of diseased plants and can be transmitted to a healthy plant through wounds or by mechanical means. The chrysanthemum is known to be affected with 5 viruses, namely yellows, Aspermy, rosette, mosaic and stunt. Stunt is the only one that has caused much concern. It has been found that aphids as well as mechanical handling will cause stunt to spread.

Once a plant is infected with a virus, it usually always remains affected. To define a virus, the following is as good as any: A virus is a protein which requires the presence of living cells for multiplication and it causes changes in the structure and functions of living cells.



Septoria Leaf Spot

PESTS AND THEIR CONTROL

FOLIAR NEMATODE

The spread of this pest has been very rapid in recent years owing to the increased trade in chrysanthemums and the ease with which the nematode is transported in plants and cuttings. Too few growers have become familiar with this pest, and consequently no effort has been put forth to control it.

Injury. The leaves attacked become blotched, turn at first greenish-yellow, then brownish, later gray and finally black until the entire leaf dies and hangs down on the stem. Under conditions of high humidity both in the open during a wet season and under glass due to excessive watering, the spread of the pest may be extremely rapid.

Control. P40 applied at the rate of 3 pounds per 100 square feet has given good control. Wait 2 to 4 weeks after benching before applying. It is better to apply P40 in 2 applications, 1½

pounds each time, 7 to 10 days apart. The latest findings show that foliar nematodes can be controlled with **Parathion** either as an aerosol or liquid spray. **Systox** emulsion applied as soil drench 2-4 weeks after planting is effective.

COMBINATION SPRAYS

At times it is more economical and convenient to mix two or more sprays and apply them in one operation. Before such mixtures are prepared, the grower should be sure no reaction harmful to the plants will occur, and that the efficiency of the separate ingredients is not reduced. Consult your State Entomologist or Plant Pathologist for information on combination sprays for specific crops.

A good combination spray for chrysanthemums which will control most diseases and insect pests, can be made with **Lindane**, **Parzate**, **DDT** and **Vapotone**. Details on dilutions are as follows:

MATERIAL	AMOUNT TO MAKE		
	100 GALLONS	20 GALLONS	3 GALLONS
WATER			
DuPont Spreader-Sticker	6 oz.	2 tablesp.	1 teasp.
Lindane	1 lb.	3 ounces	1½ tablesp.
Parzate	1½ lbs.	5 ounces	2 tablesp.
Deenate 50W	2 lbs.	6 ounces	3 tablesp.
*Vapatone	½ pt.	3½ tablesp.	1½ teasp.

*Parathion, Aramite or Endrin may be used in place of Vapatone in this combination spray.

To prepare: (1) Measure out spreader and dilute in small quantity of water. (2) Fill tank with required water and add the diluted spreader and stir. (3) Take out a small amount in jar, add the proper amount of Parzate and shake vigorously until all the powder is thoroughly wetted. (4) Pour this mixture back into the tank, preferably through a fine screen or cheesecloth and stir. (5) Measure out Vapatone and dilute in small amount of water and add to the tank. Keep stirring or keep agitator running while adding the materials.

MATERIAL AND AMOUNT (per 100 gallons of water for spraying)

- 2 pounds 15% **Aramite** wettable powder
- 1 pound **Captan** wettable powder
- 1 pound **Chlordane** 50% wettable powder
- 1 pound 25½% **Chlorobenzilate** wettable powder
- 1 pint **CM19**—Emulsifiable solution
- 2 pounds 25% **Diazanone** wettable powder
- 2 pounds 50% **DDT** wettable powder
- 1 pound **Dieldrin** 25% wettable powder
- 1 pint 25% **Dimite** emulsifiable solution
- 1 quart **Endrin** emulsifiable solution
- 1½ pounds **Fermate** wettable powder
- 1 pound 25% **Lindane** wettable powder
- 1½ pints 50% **Malathion** emulsifiable solution
- 2 pounds 25% **Malathion** wettable powder
- 1½ pounds 15% **Parathion** wettable powder
- 1½ pounds **Parzate** wettable powder
- ¼ pint 40% **TEPP** emulsifiable solution
- ½ pint 20% **TEPP** emulsifiable solution
- 1 to 1½ pounds 25% **Kelthane** wettable powder
- 1 pint 25% **Kelthane** emulsifiable solution
- ½ pint **Systox** emulsifiable solution
- 1 pound **Tedion** 25% wettable powder
- 1 pound **Terrachlor** 75% wettable powder

YEAR-ROUND CHRYSANTHEMUM
FLOWERING SCHEDULE

BLOOM — MAY 15, 1961

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40 - 50°	Jan. 2	Jan. 30	Jan. 2 - Mar. 6 Jan. 2 - Mar. 13 Jan. 2 - Mar. 20	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week
35 - 40°	Jan. 9	Feb. 7	Jan. 9 - Mar. 6 Jan. 9 - Mar. 13 Jan. 9 - Mar. 20	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week
25 - 35°	Jan. 23	Feb. 13	Jan. 23 - Mar. 6 Jan. 23 - Mar. 13 Jan. 23 - Mar. 20	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week

BLOOM — MAY 22, 1961

40 - 50°	Jan. 16	Feb. 13	Jan. 16 - Mar. 13 Jan. 16 - Mar. 20 Jan. 16 - Mar. 27	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week
25 - 40°	Jan. 30	Feb. 20	Jan. 30 - Mar. 13 Jan. 30 - Mar. 20 Jan. 30 - Mar. 27	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week

BLOOM — MAY 29, 1961

40 - 50°	Jan. 30	Feb. 27	Jan. 30 - Mar. 20 Jan. 30 - Mar. 27 Jan. 30 - Apr. 3	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week
25 - 40°	Feb. 6	Feb. 27	Feb. 6 - Mar. 20 Feb. 6 - Mar. 27 Feb. 6 - Apr. 3	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week

BLOOM — JUNE 5, 1961

25 - 50°	Feb. 13	Mar. 6	Feb. 13 - Mar. 27 Feb. 13 - Apr. 3 Feb. 13 - Apr. 10	Mar. 27 Apr. 3 Apr. 10	10 Week 9 Week 8 Week
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BLOOM — JUNE 12, 1961

25 - 50°	Feb. 20	Mar. 13	Feb. 20 - Apr. 3 Feb. 20 - Apr. 10 Feb. 20 - Apr. 17	Apr. 3 Apr. 10 Apr. 17	10 Week 9 Week 8 Week
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* For No Pinch Method: Plant and Light on Pinch Date



VARIETIES IN RESPONSE GROUPS

		10 WEEK	9 WEEK	8 WEEK
WHITE	S	Imp. Ind. White Crystal Queen Fred Shoemsmith	Donlope's Wh. Sp. Queen's Lace Wh. Mary Garden	Wh. Pink Chief Silver Sheen
	P	Sovereign Hurricane Ping Pong Whitetop Iceberg Snow Crystal Dawn Star Coronado Illini Igloo Shasta Skyline Stardust Illini Snowdrift	Silvertone Cloudbank White Popcorn White Keepsake Pinocchio Alabaster Memento Halo Alaska Thistledown	Echo Blizzard Pristine
YELLOW	S	Imp. Ind. Yellow Ind. Gold Explorer Gol. Yel. Princess Anne No. 2 Yellow Queen	Mecca Luyona Gold Lace Golden Boy	Blazing Gold Butterball
	P	Goldtop Aztec Golden Bantam Yellow Beauregard No. 2 Yellow Iceberg Golden Crystal Golden Shasta Yellow Igloo Heyday Golden Stardust Jackstraw	Yellow Keepsake Gold Coast Happiness Sunbeam Flair No. 2 Dandy Statesman Brilliancy Yellowchip Starbright Sunup	Yellow Calumet Topflight
BRONZE & RED	S	Dk. Ind. Bronze Nomago Golden Gate Copper Queen	Mrs. Palmero Symbol Fred Yule	Amber Bright Mayford Titan
	P	Tuneful Bronze Delight Dillon Beauregard Wizard Giltglow Amberhue	Panorama Resolute Gaiety Buckskin Bronzechip Copperchip Tanfastic	Calumet Dark Calumet
PINK	S	Ind. Pink Princess Anne No. 2 Dark Queen	Bunbu Miss America	Pink Chief
	P	Delight Overture Portrait Pennant Excello Cheerful	Bluechip Cherrychip Darkchip Tempo	Enterprise Accolade Mirth

S — Standard

P — Pompon

YEAR-ROUND FLOWERING SCHEDULE

POT PLANT SCHEDULE

VARIETY DESCRIPTION

YEAR-ROUND CHRYSANTHEMUM
FLOWERING SCHEDULE

BLOOM — JUNE 19, 1961

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
25 - 50°	Feb. 29	Mar. 20	Feb. 27 - Apr. 10 Feb. 27 - Apr. 17 Feb. 27 - Apr. 24	Apr. 10 Apr. 17 Apr. 24	10 Week 9 Week 8 Week

BLOOM — JUNE 26, 1961

25 - 50°	Mar. 6	Mar. 27	Mar. 6 - Apr. 17 Mar. 6 - Apr. 24 Mar. 6 - May 1	Apr. 17 Apr. 24 May 1	10 Week 9 Week 8 Week
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BLOOM — JULY 3, 1961

25 - 50°	Mar. 13	Apr. 3	Mar. 13 - Apr. 24 Mar. 13 - May 1 Mar. 13 - May 8	Apr. 24 May 1 May 8	10 Week 9 Week 8 Week
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BLOOM — JULY 10, 1961

25 - 50°	Mar. 20	Apr. 10	Mar. 20 - May 1 Mar. 20 - May 8 Mar. 20 - May 15	May 1 May 8 May 15	10 Week 9 Week 8 Week
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BLOOM — JULY 17, 1961

25 - 50°	Mar. 27	Apr. 17	Mar. 27 - May 1 Mar. 27 - May 8 Mar. 27 - May 15	May 8 May 15 May 22	10 Week 9 Week 8 Week
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BLOOM — JULY 24, 1961

25 - 50°	Apr. 3	Apr. 24	Apr. 3 - May 1 Apr. 3 - May 8 Apr. 3 - May 15	May 15 May 22 May 29	10 Week 9 Week 8 Week
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BLOOM — JULY 31, 1961

25 - 50°	Apr. 10	May 1	Apr. 10 - May 1 Apr. 10 - May 8 Apr. 10 - May 15	May 22 May 29 June 5	10 Week 9 Week 8 Week
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BLOOM — AUGUST 7, 1961

25 - 50°	Apr. 17	May 8	Apr. 17 - May 1 Apr. 17 - May 8 Apr. 17 - May 15	May 29 June 5 June 12	10 Week 9 Week 8 Week
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BLOOM — AUGUST 14, 1961

25 - 50°	Apr. 24	May 15	Apr. 24 - May 1 Apr. 24 - May 8 Apr. 24 - May 15	June 5 June 12 June 19	10 Week 9 Week 8 Week
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* For No Pinch Method: Plant and Light on Pinch Date

YEAR-ROUND CHRYSANTHEMUM
FLOWERING SCHEDULE

BLOOM — AUGUST 21, 1961

LATITUDE	PLANT	PINCH*	START SHADE	RESPONSE GROUP
25 - 50°	May 1	May 22	June 12 June 19 June 26	10 Week 9 Week 8 Week

BLOOM — AUGUST 28, 1961

25 - 50°	May 8	May 29	June 19 June 26 July 3	10 Week 9 Week 8 Week
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BLOOM — SEPTEMBER 4, 1961

25 - 50°	May 15	June 5	June 26 July 3 July 10	10 Week 9 Week 8 Week
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* For No Pinch Method: Plant on Pinch Date

VARIETIES IN RESPONSE GROUPS

10 WEEK		9 WEEK	8 WEEK
WHITE	S Giant Betsy Ross The Favourite	Marblehead Donlope's Wh. Sp. Queen's Lace Themesong	Wh. Pink Chief Silver Sheen
	P Sovereign Hurricane Ping Pong Whitetop Iceberg Snow Crystal Dawn Star Coronado Illini Igloo Viscount Shasta Skyline Stardust Illini Snowdrift	Silvertone Cloudbank Popcorn White Popcorn Keepsake Pinocchio Alabaster Memento Whitechip Alaska Thistledown	Echo Blizzard Pristine
YELLOW	S Yellow Betsy Ross Everest Gol. Yel. Princess Anne Rainier	Golden Marblehead Luyona Good News Golden Boy	Amber Bright Blazing Gold Butterball
	P Crescendo Yellow Beaugard No. 2 Yellow Iceberg Golden Crystal Golden Shasta Yellow Igloo Yel. Ill. Snowdrift Fanfare	Yel. Silvertone Yel. Keepsake Happiness Sunup Sunbeam No. 2 Dandy Statesman Yellowchip	Yellow Calumet Topflight
BRONZE & RED	S Golden Gate Br. Princess Anne	Symbol Fred Yule	
	P Red Jetfire Dillion Beaugard Wizard	Panorama Bronze Dot Buckskin Copperchip Tanfastic	Calumet Dark Calumet
PINK	S Laughter	Bunbu Miss America	
	P Overture Bluebird Pennant Excello	Pinkette Reward Bluechip Darkchip Cherrychip	Mirth

S — Standard

P — Pompon

YEAR-ROUND CHRYSANTHEMUM
FLOWERING SCHEDULE

BLOOM — SEPTEMBER 11, 1961

LATITUDE	PLANT	PINCH*	START SHADE	RESPONSE GROUP
25 - 50°	May 22	June 12	July 3 July 10	10 Week 9 Week

BLOOM — SEPTEMBER 18, 1961

25 - 50°	May 29	June 19	July 3 July 10 July 17	11 Week 10 Week 9 Week
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BLOOM — SEPTEMBER 25, 1961

25 - 50°	May 29	June 19	July 10 July 17 July 24	11 Week 10 Week 9 Week
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BLOOM — OCTOBER 2, 1961

40 - 50°	June 5	June 26	July 17 July 24 July 31	11 Week 10 Week 9 Week
25 - 40°	June 12	July 3	July 17 July 24 July 31	11 Week 10 Week 9 Week

BLOOM — OCTOBER 9, 1961

40 - 50°	June 12	July 3	July 24 July 31 Aug. 7	11 Week 10 Week 9 Week
25 - 40°	June 19	July 10	July 24 July 31 Aug. 7	11 Week 10 Week 9 Week

BLOOM — OCTOBER 16, 1961

40 - 50°	June 12	July 3	July 31 Aug. 7 Aug. 14	11 Week 10 Week 9 Week
25 - 40°	June 26	July 17	July 31 Aug. 7 Aug. 14	11 Week 10 Week 9 Week

BLOOM — OCTOBER 23, 1961

40 - 50°	June 19	July 10	Aug. 7 Aug. 14 No	11 Week 10 Week 9 Week
25 - 40°	July 3	July 24	Aug. 7 Aug. 14 No	11 Week 10 Week 9 Week

BLOOM — OCTOBER 30, 1961

40 - 50°	June 26	July 17	Aug. 7 Aug. 14 Aug. 21	12 Week 11 Week 10 Week
30 - 40°	July 3	July 24	Aug. 7 Aug. 14 Aug. 21	12 Week 11 Week 10 Week
25 - 30°	July 10	July 31	Aug. 7 Aug. 14 Aug. 29	12 Week 11 Week 10 Week

* For No Pinch Method: Plant on Pinch Date



VARIETIES IN RESPONSE GROUPS

	12 WEEK	11 WEEK	10 WEEK	9 WEEK	8 WEEK
WHITE	S White Peter John	Marketeer	Giant No. 4 Ind. White Columbia Imp. Ind. White Crystal Queen Giant Betsy Ross	Donlope's Wh. Sp. Queen's Lace Albatross Themesong	White Pink Chief Silver Sheen
	P White Princess Silvercrest Illini Peace Illini Glacier	White Taffeta Divinity Sculpture Jupiter Highbrow Bride Lightning	Sovereign Hurricane Ping Pong Whitetop Iceberg Encore Dawn Star Coronado Illini Igloo Shasta Cloudburst Milady Skyline Stardust Illini Snowdrift	Silvertone White Popcorn White Keepsake Pinocchio Memento Alaska Cloudbank Alabaster	Echo Blizzard Pristine
YELLOW	S Yellow Peter John	Harvester	Imp. Ind. Yellow Explorer Everest Gol. Yel. Princ. Anne No. 2 Yellow Queen Rainier	Luyona Gold Lace Good News Golden Boy	Blazing Gold Butterball
	P Goldsmith Highlander Illini Wampum Golden Fortune Omega Yellow Galaxy	Etude Souvenir Highball Old Gold Forty Niner Shane Illini Goldrift Lollipop Klondike Golden Paramount	Imperial Goldtop Golden Bantam Yellow Beauregard No. 2 Yel. Iceberg Golden Crystal Jackstraw Golden Shasta Heyday Golden Stardust	Yellow Keepsake Gold Coast Happiness Sunup Sunbeam Flair Statesman Brilliance Yellowchip Starbright	
BRONZE & RED	S Br. Peter John	Maple Leaves Mrs. Eisenhower Balcomb Perfection Valentine	Dk. Ind. Bronze Woking Scarlet Br. Princess Anne Copper Queen	Chambrier Symbol Detroit News Fred Yule	Amber Bright Mayford Titan
	P Dragon Galaxy Bronze Goldsmith Crackerjack	Beauregard Supreme Bronze Etude Copper Jubilation Dark Bronze Ranger Rebel Cardinal Rubaiyat Thelma	Tuneful Red Jetfire Bronze Delight Dillon Beauregard Wizard Climax Giltglow Amberhue	Gaiety Bronzechip Copperchip Peachchip Tanfastic Buccaneer Red Daisy Bronze Dot	Calumet Dark Calumet Rajah
PINK	S Pink Peter John	Thanksgiving Pink	Ind. Pink Bluebird Princess Anne Orchid Queen No. 2 Dk. Queen	Bunbu Miss America	Pink Chief
	P Hi-Fi Legend Delmar Splendor Royal Prom	Jubilation Pink Jubilation Staccato Blue Skies Delmarvel Signet	Delight Overture Portrait Pennant Excello Cheerful	Bluechip Cherrychip Pearlchip	Accolade Mirth

S — Standard

P — Pompon



YEAR-ROUND CHRYSANTHEMUM FLOWERING SCHEDULE

BLOOM — NOVEMBER 6, 1961

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40 - 50°	June 26	July 17	None None Aug. 1 - Aug. 28	Aug. 14 Aug. 21 Aug. 28	12 Week 11 Week 10 Week
30 - 40°	July 3	July 24	None None Aug. 1 - Aug. 28	Aug. 14 Aug. 21 Aug. 28	12 Week 11 Week 10 Week
25 - 30°	July 10	July 31	None None Aug. 1 - Aug. 28	Aug. 14 Aug. 21 Aug. 28	12 Week 11 Week 10 Week

BLOOM — NOVEMBER 13, 1961

40 - 50°	July 3	July 24	None None None Aug. 1 - Sept. 4	Aug. 14 Aug. 21 Aug. 28 No	13 Week 12 Week 11 Week 10 Week
30 - 40°	July 10	July 31	None None None Aug. 1 - Sept. 4	Aug. 14 Aug. 21 Aug. 28 No	13 Week 12 Week 11 Week 10 Week
25 - 30°	July 17	Aug. 7	None None Aug. 1 - Sept. 4	Aug. 22 Aug. 29 No	12 Week 11 Week 10 Week

BLOOM — NOVEMBER 20, 1961

40 - 50°	July 10	July 31	None None Aug. 7 - Sept. 4 Aug. 1 - Sept. 11	Aug. 21 Aug. 28 No No	13 Week 12 Week 11 Week 10 Week
30 - 40°	July 17	Aug. 7	None None Aug. 7 - Sept. 4 Aug. 1 - Sept. 11	Aug. 21 Aug. 28 No No	13 Week 12 Week 11 Week 10 Week
25 - 30°	July 24	Aug. 14	None Aug. 7 - Sept. 4 Aug. 1 - Sept. 11	Aug. 28 No No	12 Week 11 Week 10 Week

BLOOM — NOVEMBER 27, 1961

40 - 50°	July 17	Aug. 7	None None Aug. 14 - Sept. 4 Aug. 7 - Sept. 11 Aug. 1 - Sept. 18	Aug. 21 Aug. 28 No No No	14 Week 13 Week 12 Week 11 Week 10 Week
30 - 40°	July 24	Aug. 14	None None Aug. 14 - Sept. 4 Aug. 7 - Sept. 11 Aug. 1 - Sept. 18	Aug. 21 Aug. 28 No No No	14 Week 13 Week 12 Week 11 Week 10 Week
25 - 30°	July 31	Aug. 21	Aug. 14 - Sept. 4 Aug. 7 - Sept. 11 Aug. 1 - Sept. 18	No No No	12 Week 11 Week 10 Week

* For No Pinch Method: Plant and Light on Pinch Date



VARIETIES IN RESPONSE GROUPS

		14 WEEK	13 WEEK	12 WEEK	11 WEEK	10 WEEK
WHITE	S		Smith's White Dec. White	Imp. Wh. Peter John Chattanooga December Glory	Sterling Marketeer	Imp. Ind. White Giant No. 4 Ind. Wh. Giant Betsy Ross Crystal Queen Melo Columbia Fred Shoemsmith
	P	Trenton Silversmith Snowcap Elegance	Icecap Acclaim Illini Alba Iceflo Satellite Snowcrest	White Princess Silvercrest Illini Peace Illini Glacier	White Taffeta Sculpture Lightning Bride Jupiter Divinity Surfside Highbrow	Sovereign Hurricane Ping Pong Whitetop Iceberg Encore Snow Crystal Dawn Star Coronado Cloudburst Shasta Milady Skyline Stardust Illini Igloo Illini Snowdrift
YELLOW	S		Tobin's Yellow Smith's Yellow Meteore	Yellow Peter John Dk. Yel. Chat'n'ga Golden Pearson No. 2 Yellow Glory	Friendly Rival Harvester Marie DePetris	Imp. Ind. Yellow Explorer Everest Gol. Yel. Princ. Anne No. 2 Yellow Queen No. 2 Yel. Shoemsmith Rainier
	P	Ill. Brighteyes Gol. Elegance Sun Valley Vibrant Sunrise	Kingpin Coronation Gol. Acclaim Spungold Corsair Yellow Snowcrest	Goldsmith Highlander Illini Wampum Golden Fortune Omega Yellow Galaxy	Etude Souvenir Highball Old Gold Forty Niner Shane Illini Goldrift Lollipop Klondike Golden Paramount	Goldtop Golden Bantam Yellow Beauregard Yellow Iceberg Imperial Golden Crystal Golden Shasta Heyday Golden Stardust Jackstraw
BRONZE & RED	S		Red Shoemsmith Sal. Ruby Shoemsmith Sal. Br. Shoemsmith Sal. Apr. Shoemsmith Sal.	Br. Peter John Gladys Pearson No. 2 Oak Leaf	Maple Leaves Balcombe Perfection Red Balcombe Perf. Mrs. Eisenhower Calvert's Gold	Dk. Ind. Bronze Woking Scarlet Golden Gate Br. Princess Anne Copper Queen Mrs. Roy
	P	Bronze Alvoda Christ. Greet'g Beau Brummell Ill. Homespun Poinsettia	Christmas Star Dk. Br. Minstrel Flame Minstrel	Dragon Galaxy Bronze Goldsmith Crackerjack	Beauregard Supreme Bronze Etude Copper Jubilation Dark Bronze Ranger Rebel Cardinal Rubaiyat Thelma	Tuneful Red Jettie Bronze Delight Dillon Beauregard Giltglow Wizard Climax Amberhue
PINK	S		Shoemsmith Salmon	Pink Peter John	Calvert's Pink Thanksgiving Pink Ed Seidewitz	Ind. Pink Bluebird Princess Anne Rosamund Orchid Queen No. 2 Dk. Queen
	P	Alvoda Riviera Lynda McLane	Eminence Debutante Minstrel Imp. Pink Minstrel	Hi-Fi Legend Delmar Splendor Royal Prom	Jubilation Pink Jubilation Staccato Blue Skies Delmarvel Signet	Delight Overture Portrait Pennant Excello Cheerful

S — Standard

P — Pompon



YEAR-ROUND CHRYSANTHEMUM FLOWERING SCHEDULE

BLOOM — DECEMBER 4, 1961

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40 - 50°	July 17	Aug. 7	None	Aug. 21	14 Week
			None	No	13 Week
			Aug. 14 - Sept. 11	No	12 Week
			Aug. 7 - Sept. 18	No	11 Week
			Aug. 1 - Sept. 25	No	10 Week
30 - 40°	July 24	Aug. 14	None	Aug. 21	14 Week
			None	No	13 Week
			Aug. 14 - Sept. 11	No	12 Week
			Aug. 7 - Sept. 18	No	11 Week
			Aug. 1 - Sept. 25	No	10 Week
25 - 30°	Aug. 7	Aug. 28	Aug. 15 - Sept. 12	No	12 Week
			Aug. 8 - Sept. 19	No	11 Week
			Aug. 1 - Sept. 26	No	10 Week

BLOOM — DECEMBER 11, 1961

40 - 50°	July 24	Aug. 14	None	No	14 Week
			Aug. 21 - Sept. 11	No	13 Week
			Aug. 14 - Sept. 18	No	12 Week
			Aug. 7 - Sept. 25	No	11 Week
			Aug. 1 - Oct. 2	No	10 Week
35 - 40°	July 31	Aug. 21	None	No	14 Week
			Aug. 21 - Sept. 11	No	13 Week
			Aug. 14 - Sept. 18	No	12 Week
			Aug. 7 - Sept. 25	No	11 Week
			Aug. 1 - Oct. 2	No	10 Week
30 - 35°	Aug. 7	Aug. 28	None	No	14 Week
			Aug. 21 - Sept. 11	No	13 Week
			Aug. 14 - Sept. 18	No	12 Week
			Aug. 7 - Sept. 25	No	11 Week
			Aug. 1 - Oct. 2	No	10 Week

BLOOM — DECEMBER 18, 1961

40 - 50°	July 31	Aug. 21	None	No	15 Week
			Aug. 28 - Sept. 11	No	14 Week
			Aug. 21 - Sept. 18	No	13 Week
			Aug. 14 - Sept. 25	No	12 Week
			Aug. 7 - Oct. 2	No	11 Week
			Aug. 1 - Oct. 9	No	10 Week
35 - 40°	Aug. 14	Sept. 4	None	No	15 Week
			Aug. 28 - Sept. 11	No	14 Week
			Aug. 21 - Sept. 18	No	13 Week
			Aug. 14 - Sept. 25	No	12 Week
			Aug. 14 - Oct. 2	No	11 Week
			Aug. 14 - Oct. 9	No	10 Week
30 - 35°	Aug. 21	Sept. 11	Aug. 21 - Sept. 18	No	13 Week
			Aug. 21 - Sept. 25	No	12 Week
			Aug. 21 - Oct. 2	No	11 Week
			Aug. 21 - Oct. 9	No	10 Week
25 - 30°	Aug. 21	Sept. 11	Aug. 21 - Sept. 25	No	12 Week
			Aug. 21 - Oct. 2	No	11 Week
			Aug. 21 - Oct. 9	No	10 Week

BLOOM — DECEMBER 25, 1961

40 - 50°	Aug. 7	Aug. 28	None	No	15 Week
			Aug. 28 - Sept. 18	No	14 Week
			Aug. 21 - Sept. 25	No	13 Week
			Aug. 14 - Oct. 2	No	12 Week
			Aug. 7 - Oct. 9	No	11 Week
			Aug. 7 - Oct. 16	No	10 Week
35 - 40°	Aug. 14	Sept. 4	None	No	15 Week
			Aug. 28 - Sept. 18	No	14 Week
			Aug. 21 - Sept. 25	No	13 Week
			Aug. 14 - Oct. 2	No	12 Week
			Aug. 14 - Oct. 9	No	11 Week
			Aug. 14 - Oct. 16	No	10 Week
30 - 35°	Aug. 21	Sept. 11	Aug. 21 - Sept. 25	No	13 Week
			Aug. 21 - Oct. 2	No	12 Week
			Aug. 21 - Oct. 9	No	11 Week
			Aug. 21 - Oct. 16	No	10 Week
25 - 30°	Aug. 28	Sept. 18	Aug. 28 - Oct. 2	No	12 Week
			Aug. 28 - Oct. 9	No	11 Week
			Aug. 28 - Oct. 16	No	10 Week

* For No Pinch Method: Plant and Light on Pinch Date



VARIETIES IN RESPONSE GROUPS

		15 WEEK	12 WEEK	11 WEEK	10 WEEK
WHITE	S		Imp. Wh. Peter John Chattanooga December Glory	Sterling Marketeer	Giant No. 4 Ind. White Crystal Queen Mefo Fred Shoesmith Columbia
	P	Revelation Snow Talmeda Illini Cascade	Silvercrest Illini Peace White Valencia Fortune Illini Glacier	Bride Lightning Divinity Jupiter Highbrow Surfside	Skyline Iceberg Shasta Stardust Little America Illini Snowdrift
YELLOW	S		Dk. Yel. Chat'n'ga No. 2 Yellow Glory	Harvester	Imp. Ind. Yellow Gol. Yel. Princ. Anne No. 2 Yellow Queen Yellow Mefo No. 2 Yel. Shoesmith
	P	Siren Yuleflame Yellow Snow Yellow Ill. Cascade	Highlander Illini Wampum Yel. Valencia Golden Fortune Omega Yellow Galaxy	Highball Old Gold Souvenir Shane Illini Goldrift Lollipop	Yel. Beauregard No. 2 Yel. Iceberg Golden Shasta Yellow Igloo Imperial Heyday
BRONZE & RED	S		Imp. Br. Pet. John Gladys Pearson No. 2 Oak Leaf	Balcombe Perf. Red Balcombe Perf. Calvert's Gold	Dk. Ind. Bronze Golden Gate Br. Princess Anne Copper Queen
	P		Apr. Valencia Galaxy Holiday Crackerjack Dragon	Cop. Jubilation Cardinal Rebel Olnura Rubaiyat Bronze Etude	Jetfire Beauregard Bronze Delight Wizard Climax
PINK	S		Pink Peter John	Calvert's Pink Thanks. Pink	Ind. Pink Princess Anne Orchid Queen No. 2 Dark Queen
	P		HiFi Legend Delmar Splendor Royal Prom	Jubilation Pink Jubilation Signet Delmarvel Staccato	Delight Overture Cheerful

S — Standard

P — Pompon



YEAR-ROUND CHRYSANTHEMUM FLOWERING SCHEDULE

BLOOM — JANUARY 1, 1962

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40 - 50°	Aug. 14	Sept. 4	Aug. 28 - Sept. 25	No	14 Week
			Aug. 21 - Oct. 2	No	13 Week
			Aug. 14 - Oct. 9	No	12 Week
			Aug. 14 - Oct. 16	No	11 Week
			Aug. 14 - Oct. 23	No	10 Week
35 - 40°	Aug. 21	Sept. 11	Aug. 28 - Sept. 25	No	14 Week
			Aug. 21 - Oct. 2	No	13 Week
			Aug. 21 - Oct. 9	No	12 Week
			Aug. 21 - Oct. 16	No	11 Week
			Aug. 21 - Oct. 23	No	10 Week
30 - 35°	Aug. 28	Sept. 18	Aug. 28 - Oct. 2	No	13 Week
			Aug. 28 - Oct. 9	No	12 Week
			Aug. 28 - Oct. 16	No	11 Week
			Aug. 28 - Oct. 23	No	10 Week
25 - 30°	Sept. 4	Sept. 25	Sept. 4 - Oct. 9	No	12 Week
			Sept. 4 - Oct. 16	No	11 Week
			Sept. 4 - Oct. 23	No	10 Week

BLOOM — JANUARY 8, 1962

40 - 50°	Aug. 14	Sept. 4	Aug. 28 - Oct. 2	No	14 Week
			Aug. 21 - Oct. 9	No	13 Week
			Aug. 14 - Oct. 16	No	12 Week
			Aug. 14 - Oct. 23	No	11 Week
			Aug. 14 - Oct. 30	No	10 Week
35 - 40°	Aug. 21	Sept. 11	Aug. 28 - Oct. 2	No	14 Week
			Aug. 21 - Oct. 9	No	13 Week
			Aug. 21 - Oct. 16	No	12 Week
			Aug. 21 - Oct. 23	No	11 Week
			Aug. 21 - Oct. 30	No	10 Week
30 - 35°	Aug. 28	Sept. 18	Aug. 28 - Oct. 9	No	13 Week
			Aug. 28 - Oct. 16	No	12 Week
			Aug. 28 - Oct. 23	No	11 Week
			Aug. 28 - Oct. 30	No	10 Week
25 - 30°	Sept. 11	Oct. 2	Sept. 11 - Oct. 16	No	12 Week
			Sept. 11 - Oct. 23	No	11 Week
			Sept. 11 - Oct. 30	No	10 Week

BLOOM — JANUARY 15, 1962

40 - 50°	Aug. 21	Sept. 11	Aug. 28 - Oct. 9	No	14 Week
			Aug. 21 - Oct. 16	No	13 Week
			Aug. 21 - Oct. 23	No	12 Week
			Aug. 21 - Oct. 30	No	11 Week
			Aug. 21 - Nov. 6	No	10 Week
35 - 40°	Aug. 28	Sept. 18	Aug. 28 - Oct. 9	No	14 Week
			Aug. 28 - Oct. 16	No	13 Week
			Aug. 28 - Oct. 23	No	12 Week
			Aug. 28 - Oct. 30	No	11 Week
			Aug. 28 - Nov. 6	No	10 Week
30 - 35°	Sept. 4	Sept. 25	Sept. 4 - Oct. 16	No	13 Week
			Sept. 4 - Oct. 23	No	12 Week
			Sept. 4 - Oct. 30	No	11 Week
			Sept. 4 - Nov. 6	No	10 Week
25 - 30°	Sept. 18	Oct. 9	Sept. 18 - Oct. 23	No	12 Week
			Sept. 18 - Oct. 30	No	11 Week
			Sept. 18 - Nov. 6	No	10 Week

BLOOM — JANUARY 22, 1962

40 - 50°	Aug. 28	Sept. 18	Aug. 28 - Oct. 16	No	14 Week
			Aug. 28 - Oct. 23	No	13 Week
			Aug. 28 - Oct. 30	No	12 Week
			Aug. 28 - Nov. 6	No	11 Week
			Aug. 28 - Nov. 13	No	10 Week
35 - 40°	Sept. 4	Sept. 25	Sept. 4 - Oct. 16	No	14 Week
			Sept. 4 - Oct. 23	No	13 Week
			Sept. 4 - Oct. 30	No	12 Week
			Sept. 4 - Nov. 6	No	11 Week
			Sept. 4 - Nov. 13	No	10 Week
30 - 35°	Sept. 11	Oct. 2	Sept. 11 - Oct. 23	No	13 Week
			Sept. 11 - Oct. 30	No	12 Week
			Sept. 11 - Nov. 6	No	11 Week
			Sept. 11 - Nov. 13	No	10 Week
25 - 30°	Sept. 18	Oct. 9	Sept. 18 - Oct. 30	No	12 Week
			Sept. 18 - Nov. 6	No	11 Week
			Sept. 18 - Nov. 13	No	10 Week

* For No Pinch Method: Plant and Light on Pinch Date



VARIETIES IN RESPONSE GROUPS

		14 WEEK	13 WEEK	12 WEEK	11 WEEK	10 WEEK
WHITE	S			Imp. Wh. Peter John		Giant No. 4 Ind. White Crystal Queen Melo Fred Shoemith Columbia
	P	Silversmith Snowcap	Icecap Acclaim Illini Alpha Iceflo Satellite Snowcrest		Bride Divinity Jupiter Sculpture Belray Surfside	Skyline Iceberg Illini Igloo Shasta Stardust Illini Snowdrift
YELLOW	S			Yellow Peter John		Imp. Ind. Yellow Gol. Yel. Princ. Anne No. 2 Yellow Queen No. 2 Yel. Shoemith
	P	Ill. Brighteyes Sun Valley	Kingpin Coronation Gol. Acclaim Spungold Corsair Yellow Snowcrest	Omega Yellow Galaxy	Highball Old Gold Souvenir Shane Illini Goldrift	Yel. Beauregard No. 2 Yel. Iceberg Golden Shasta Yellow Igloo Imperial Heyday
BRONZE & RED	S			Imp. Br. Peter John	Valentine	Dk. Ind. Bronze Golden Gate Br. Princess Anne Copper Queen
	P	Bronze Alvoda Beau Brummell Ill. Homespun Merrymaker		Galaxy Holiday Crackerjack Red Galaxy Dragon	Tan Vedova Cardinal Rebel	Beauregard Bronze Delight
PINK	S			Pink Peter John	Thanksgiving Pink	Ind. Pink Princess Anne Orchid Queen No. 2 Dark Queen
	P	Alvoda Dark Alvoda Riviera	Eminence Debutante Pink Snowdrop	HiFi Legend Delmar Splendor Royal	Signet Delmarvel Vedova Venoya	Delight Cheerful

S — Standard

P — Pompon



YEAR-ROUND CHRYSANTHEMUM FLOWERING SCHEDULE

BLOOM — JANUARY 29, 1962

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40 - 50°	Aug. 28	Sept. 18	Aug. 28 - Oct. 30 Aug. 28 - Nov. 6 Aug. 28 - Nov. 13 Aug. 28 - Nov. 20	No No No No	13 Week 12 Week 11 Week 10 Week
35 - 40°	Sept. 4	Sept. 25	Sept. 4 - Oct. 30 Sept. 4 - Nov. 6 Sept. 4 - Nov. 13 Sept. 4 - Nov. 20	No No No No	13 Week 12 Week 11 Week 10 Week
30 - 35°	Sept. 18	Oct. 9	Sept. 18 - Oct. 30 Sept. 18 - Nov. 6 Sept. 18 - Nov. 13 Sept. 18 - Nov. 20	No No No No	13 Week 12 Week 11 Week 10 Week
25 - 30°	Sept. 25	Oct. 16	Sept. 25 - Nov. 6 Sept. 25 - Nov. 13 Sept. 25 - Nov. 20	No No No	12 Week 11 Week 10 Week

BLOOM — FEBRUARY 5, 1962

40 - 50°	Sept. 4	Sept. 25	Sept. 4 - Nov. 6 Sept. 4 - Nov. 13 Sept. 4 - Nov. 20 Sept. 4 - Nov. 27	No No No No	13 Week 12 Week 11 Week 10 Week
35 - 40°	Sept. 11	Oct. 2	Sept. 11 - Nov. 6 Sept. 11 - Nov. 13 Sept. 11 - Nov. 20 Sept. 11 - Nov. 27	No No No No	13 Week 12 Week 11 Week 10 Week
30 - 35°	Sept. 25	Oct. 16	Sept. 25 - Nov. 6 Sept. 25 - Nov. 13 Sept. 25 - Nov. 20 Sept. 25 - Nov. 27	No No No No	13 Week 12 Week 11 Week 10 Week
25 - 30°	Oct. 2	Oct. 23	Oct. 2 - Nov. 20 Oct. 2 - Nov. 27	No No	11 Week 10 Week

BLOOM — FEBRUARY 12, 1962

40 - 50°	Sept. 11	Oct. 2	Sept. 11 - Nov. 13 Sept. 11 - Nov. 20 Sept. 11 - Nov. 27 Sept. 11 - Dec. 4	No No No No	13 Week 12 Week 11 Week 10 Week
35 - 40°	Sept. 18	Oct. 9	Sept. 18 - Nov. 13 Sept. 18 - Nov. 20 Sept. 18 - Nov. 27 Sept. 18 - Dec. 4	No No No No	13 Week 12 Week 11 Week 10 Week
30 - 35°	Oct. 2	Oct. 23	Oct. 2 - Nov. 20 Oct. 2 - Nov. 27 Oct. 2 - Dec. 4	No No No	12 Week 11 Week 10 Week
25 - 30°	Oct. 9	Oct. 30	Oct. 9 - Nov. 27 Oct. 9 - Dec. 4	No No	11 Week 10 Week

BLOOM — FEBRUARY 19, 1962

40 - 50°	Sept. 18	Oct. 9	Sept. 18 - Nov. 20 Sept. 18 - Nov. 27 Sept. 18 - Dec. 4 Sept. 18 - Dec. 11	No No No No	13 Week 12 Week 11 Week 10 Week
35 - 40°	Sept. 25	Oct. 16	Sept. 25 - Nov. 27 Sept. 25 - Dec. 4 Sept. 25 - Dec. 11	No No No	12 Week 11 Week 10 Week
30 - 35°	Oct. 9	Oct. 30	Oct. 9 - Nov. 27 Oct. 9 - Dec. 4 Oct. 9 - Dec. 11	No No No	12 Week 11 Week 10 Week
25 - 30°	Oct. 16	Nov. 6	Oct. 16 - Dec. 4 Oct. 16 - Dec. 11	No No	11 Week 10 Week

* For No Pinch Method: Plant and Light on Pinch Date



VARIETIES IN RESPONSE GROUPS

		13 WEEK	12 WEEK	11 WEEK	10 WEEK
WHITE	S				Giant No. 4 Ind. White Crystal Queen Mefo Fred Shoesmith Columbia
	P	Icecap Acclaim Illini Alba Iceflo Satellite Snowcrest		Bride Divinity Jupiter Sculpture Belray Surfside	Skyline Iceberg Illini Igloo Shasta Stardust Illini Snowdrift
YELLOW	S				Imp. Ind. Yellow Gol. Yel. Princ. Anne No. 2 Yellow Queen No. 2 Yel. Shoesmith
	P	Kingpin Coronation Gold. Acclaim Spungold Corsair Yellow Snowcrest	Omega Yellow Galaxy	Highball Old Gold Souvenir Shane Illini Goldrift	Yellow Beauregard No. 2 Yel. Iceberg Golden Shasta Yellow Igloo Imperial Heydey
BRONZE & RED	S				Dk. Ind. Bronze Golden Gate Br. Princess Anne Copper Queen
	P		Galaxy Holiday Crackerjack Dragon Red Galaxy	Tan Vedova Cardinal Rebel	Beauregard Bronze Delight
PINK	S				Ind. Pink Princess Anne Orchid Queen No. 2 Dark Queen
	P	Pink Snowdrop Debutante	HiFi Legend Delmar Splendor Royal	Signet Delmarvel Vedova Venoya	Delight Cheerful

S — Standard

P — Pompon



YEAR-ROUND CHRYSANTHEMUM FLOWERING SCHEDULE

BLOOM — FEBRUARY 26, 1962

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40 - 50°	Sept. 25	Oct. 16	Sept. 25 - Nov. 27	No	13 Week
			Sept. 25 - Dec. 4	No	12 Week
			Sept. 25 - Dec. 11	No	11 Week
			Sept. 25 - Dec. 18	No	10 Week
35 - 40°	Oct. 9	Oct. 30	Oct. 9 - Dec. 4	No	12 Week
			Oct. 9 - Dec. 11	No	11 Week
			Oct. 9 - Dec. 18	No	10 Week
30 - 35°	Oct. 16	Nov. 6	Oct. 16 - Dec. 4	No	12 Week
			Oct. 16 - Dec. 11	No	11 Week
			Oct. 16 - Dec. 18	No	10 Week
25 - 30°	Oct. 23	Nov. 13	Oct. 23 - Dec. 11	No	11 Week
			Oct. 23 - Dec. 18	No	10 Week

BLOOM — MARCH 5, 1962

40 - 50°	Oct. 2	Oct. 23	Oct. 2 - Dec. 4	No	13 Week
			Oct. 2 - Dec. 11	No	12 Week
			Oct. 2 - Dec. 18	No	11 Week
			Oct. 2 - Dec. 25	No	10 Week
35 - 40°	Oct. 16	Nov. 6	Oct. 16 - Dec. 11	No	12 Week
			Oct. 16 - Dec. 18	No	11 Week
			Oct. 16 - Dec. 25	No	10 Week
30 - 35°	Oct. 23	Nov. 13	Oct. 23 - Dec. 11	No	12 Week
			Oct. 23 - Dec. 18	No	11 Week
			Oct. 23 - Dec. 25	No	10 Week
25 - 30°	Oct. 30	Nov. 20	Oct. 30 - Dec. 18	No	11 Week
			Oct. 30 - Dec. 25	No	10 Week

BLOOM — MARCH 12, 1962

40 - 50°	Oct. 9	Oct. 30	Oct. 9 - Dec. 11	No	13 Week
			Oct. 9 - Dec. 18	No	12 Week
			Oct. 9 - Dec. 25	No	11 Week
			Oct. 9 - Jan. 1	No	10 Week
35 - 40°	Oct. 23	Nov. 13	Oct. 23 - Dec. 18	No	12 Week
			Oct. 23 - Dec. 25	No	11 Week
			Oct. 23 - Jan. 1	No	10 Week
30 - 35°	Oct. 30	Nov. 20	Oct. 30 - Dec. 25	No	11 Week
			Oct. 30 - Jan. 1	No	10 Week
25 - 30°	Nov. 13	Dec. 4	Nov. 13 - Dec. 25	No	11 Week
			Nov. 13 - Jan. 1	No	10 Week

BLOOM — MARCH 19, 1962

40 - 50°	Oct. 16	Nov. 6	Oct. 16 - Dec. 25	No	12 Week
			Oct. 16 - Jan. 1	No	11 Week
			Oct. 16 - Jan. 8	No	10 Week
35 - 40°	Oct. 30	Nov. 20	Oct. 30 - Jan. 1	No	11 Week
			Oct. 30 - Jan. 8	No	10 Week
30 - 35°	Nov. 6	Nov. 27	Nov. 6 - Jan. 1	No	11 Week
			Nov. 6 - Jan. 8	No	10 Week
25 - 30°	Nov. 20	Dec. 11	Nov. 20 - Jan. 1	No	11 Week
			Nov. 20 - Jan. 8	No	10 Week

* For No Pinch Method: Plant and Light on Pinch Date



VARIETIES IN RESPONSE GROUPS

13 WEEK		12 WEEK	11 WEEK	10 WEEK
WHITE	S			Giant No. 4 Ind. White Crystal Queen Mefo Fred Shoesmith Columbia
	P Icecap Acclaim Illini Alba Iceflo Snowcrest		Bride Divinity White Taffeta Sculpture Jupiter Surfside Belray	Skyline Iceberg Illini Igloo Shasta Coronado Stardust Cloudburst
YELLOW	S			Imp. Ind. Yellow Gol. Yel. Princ. Anne No. 2 Yellow Queen No. 2 Yellow Shoesmith
	P Kingpin Coronation Golden Acclaim Spungold Corsair Yellow Snowcrest	Illini Wampum Omega Yellow Galaxy	Highball Old Gold Etude Souvenir Shane Illini Goldrift	Yellow Beauregard No. 2 Yellow Iceberg Golden Shasta Yellow Igloo Imperial Heydey
BRONZE & RED	S			Dk. Ind. Bronze Golden Gate Br. Princess Anne Copper Queen
	P	Galaxy Holiday Crackerjack Dragon Red Galaxy	Beauregard Supreme Br. Jubilation Thelma Cardinal Rebel Olnura	Beauregard Bronze Delight Climax
PINK	S			Ind. Pink Princess Anne Orchid Queen No. 2 Dark Queen
	P Pink Snowdrop Debutante	HiFi Legend Delmar Splendor Royal	Signet Pink Jubilation Delmarvel Blue Skies Staccato	Delight Portrait Cheerful

S — Standard

P — Pompon

YEAR-ROUND CHRYSANTHEMUM
FLOWERING SCHEDULE

BLOOM — MARCH 26, 1962

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40 - 50°	Oct. 30	Nov. 20	Oct. 30 - Jan. 8	No	11 Week
			Oct. 30 - Jan. 15	No	10 Week
35 - 40°	Nov. 6	Nov. 27	Nov. 6 - Jan. 8	No	11 Week
			Nov. 6 - Jan. 15	No	10 Week
30 - 35°	Nov. 20	Dec. 11	Nov. 20 - Jan. 8	No	11 Week
			Nov. 20 - Jan. 15	No	10 Week
25 - 30°	Nov. 27	Dec. 18	Nov. 27 - Jan. 15	No	10 Week
			Nov. 27 - Jan. 22	No	9 Week
			Nov. 27 - Jan. 29	No	8 Week

BLOOM — APRIL 2, 1962

40 - 50°	Nov. 6	Nov. 27	Nov. 6 - Jan. 15	No	11 Week
			Nov. 6 - Jan. 22	No	10 Week
35 - 40°	Nov. 13	Dec. 4	Nov. 13 - Jan. 15	No	11 Week
			Nov. 13 - Jan. 22	No	10 Week
30 - 35°	Nov. 27	Dec. 18	Nov. 27 - Jan. 15	No	11 Week
			Nov. 27 - Jan. 22	No	10 Week
			Nov. 27 - Jan. 29	No	9 Week
25 - 30°	Dec. 4	Dec. 25	Dec. 4 - Jan. 22	No	10 Week
			Dec. 4 - Jan. 29	No	9 Week
			Dec. 4 - Feb. 5	No	8 Week

BLOOM — APRIL 9, 1962

40 - 50°	Nov. 13	Dec. 11	Nov. 13 - Jan. 22	Mar. 12	11 Week
			Nov. 13 - Jan. 29	Mar. 19	10 Week
			Nov. 13 - Feb. 5	Mar. 26	9 Week
35 - 40°	Nov. 27	Dec. 25	Nov. 27 - Jan. 22	Mar. 12	11 Week
			Nov. 27 - Jan. 29	Mar. 19	10 Week
			Nov. 27 - Feb. 5	Mar. 26	9 Week
30 - 35°	Dec. 4	Jan. 1	Dec. 4 - Jan. 29	Mar. 19	10 Week
			Dec. 4 - Feb. 5	Mar. 26	9 Week
			Dec. 4 - Feb. 12	Apr. 2	8 Week
25 - 30°	Dec. 18	Jan. 8	Dec. 18 - Jan. 29	Mar. 19	10 Week
			Dec. 18 - Feb. 5	No	9 Week
			Dec. 18 - Feb. 12	No	8 Week

BLOOM — APRIL 16, 1962

40 - 50°	Nov. 20	Dec. 18	Nov. 20 - Jan. 29	Mar. 12	11 Week
			Nov. 20 - Feb. 5	Mar. 19	10 Week
			Nov. 20 - Feb. 12	Mar. 26	9 Week
35 - 40°	Dec. 4	Jan. 1	Dec. 4 - Jan. 29	Mar. 12	11 Week
			Dec. 4 - Feb. 5	Mar. 19	10 Week
			Dec. 4 - Feb. 12	Mar. 26	9 Week
30 - 35°	Dec. 11	Jan. 8	Dec. 11 - Feb. 5	Mar. 19	10 Week
			Dec. 11 - Feb. 12	Mar. 26	9 Week
			Dec. 11 - Feb. 19	No	8 Week
25 - 30°	Dec. 25	Jan. 15	Dec. 25 - Feb. 5	Mar. 19	10 Week
			Dec. 25 - Feb. 12	Mar. 26	9 Week
			Dec. 25 - Feb. 19	No	8 Week

BLOOM — APRIL 23, 1962

40 - 50°	Dec. 4	Jan. 1	Dec. 4 - Feb. 12	Mar. 19	10 Week
			Dec. 4 - Feb. 19	Mar. 26	9 Week
			Dec. 4 - Feb. 26	Apr. 2	8 Week
35 - 40°	Dec. 11	Jan. 8	Dec. 11 - Feb. 12	Mar. 19	10 Week
			Dec. 11 - Feb. 19	Mar. 26	9 Week
			Dec. 11 - Feb. 26	Apr. 2	8 Week
30 - 35°	Dec. 18	Jan. 15	Dec. 18 - Feb. 12	Mar. 19	10 Week
			Dec. 18 - Feb. 19	Mar. 26	9 Week
			Dec. 18 - Feb. 26	Apr. 2	8 Week
25 - 30°	Jan. 1	Jan. 22	Jan. 1 - Feb. 12	Mar. 19	10 Week
			Jan. 1 - Feb. 19	Mar. 26	9 Week
			Jan. 1 - Feb. 26	Apr. 2	8 Week

* For No Pinch Method: Plant and Light on Pinch Date



VARIETIES IN RESPONSE GROUPS

		11 WEEK	10 WEEK	9 WEEK	8 WEEK
WHITE	S		Giant No. 4 Ind. White Crystal Queen Mefo Fred Shoesmith Columbia	Donlopes Wh. Sp. Queen's Lace	White Pink Chief
	P	Bride Divinity Lightning White Taffeta Sculpture Jupiter Surfside Paramount Belray	Sovereign Hurricane Ping Pong Iceberg Cloudburst Dawn Star Coronado Illini Igloo Shasta Skyline Stardust Illini Snowdrift	White Keepsake	
YELLOW	S		Imp. Ind. Yellow Explorer Gol. Yel. Princ. Anne No. 2 Yellow Queen Yellow Mefo No. 2 Yel. Shoesmith	Luyona Gold Lace	Blazing Gold Butterball
	P	Highball Old Gold Etude Souvenir Yellow Sculpture Shane Illini Goldrift Lollipop Pippin	Imperial No. 2 Yellow Iceberg Yellow Beauregard Golden Crystal Golden Shasta Heyday Jackstraw Golden Stardust Yellow Igloo	Yellow Keepsake	
BRONZE & RED	S	Maple Leaves	Dk. Ind. Bronze Golden Gate Br. Princess Anne Copper Queen	Mrs. Palmero Bronze Palmero	Mayford Titan
	P	Beauregard Sup. Cop. Jubilation Thelma Cardinal Rebel Olnura	Red Jetfire Bronze Delight Beauregard Climax No. 2 Red Humdinger Amberhue		
PINK	S		Ind. Pink Princess Anne Orchid Queen No. 2 Dark Queen Tradewind	Bunbu Miss America	Pink Chief
	P	Signet Delmarvel Pink Jubilation Blue Skies Staccato	Delight Overture Portrait Pennant Excello Cheerful		

S — Standard

P — Pompon



YEAR-ROUND CHRYSANTHEMUM FLOWERING SCHEDULE

BLOOM — APRIL 30, 1962

LATITUDE	PLANT	PINCH*	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
40 - 50°	Dec. 11	Jan. 8	Dec. 11 - Feb. 19 Dec. 11 - Feb. 26 Dec. 11 - Mar. 5	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week
35 - 40°	Dec. 18	Jan. 15	Dec. 18 - Feb. 19 Dec. 18 - Feb. 26 Dec. 18 - Mar. 5	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week
25 - 35°	Jan. 8	Jan. 29	Jan. 8 - Feb. 19 Jan. 8 - Feb. 26 Jan. 8 - Mar. 5	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week

BLOOM — MAY 7, 1962

40 - 50°	Dec. 25	Jan. 22	Dec. 25 - Feb. 26 Dec. 25 - Mar. 5 Dec. 25 - Mar. 12	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week
35 - 40°	Jan. 1	Jan. 29	Jan. 1 - Feb. 26 Jan. 1 - Mar. 5 Jan. 1 - Mar. 12	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week
25 - 35°	Jan. 15	Feb. 5	Jan. 15 - Feb. 26 Jan. 15 - Mar. 5 Jan. 15 - Mar. 12	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week

BLOOM — MAY 14, 1962

40 - 50°	Jan. 1	Jan. 29	Jan. 1 - Mar. 5 Jan. 1 - Mar. 12 Jan. 1 - Mar. 19	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week
35 - 40°	Jan. 8	Feb. 5	Jan. 8 - Mar. 5 Jan. 8 - Mar. 12 Jan. 8 - Mar. 19	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week
25 - 35°	Jan. 22	Feb. 12	Jan. 22 - Mar. 5 Jan. 22 - Mar. 12 Jan. 22 - Mar. 19	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week

BLOOM — MAY 21, 1962

40 - 50°	Jan. 15	Feb. 12	Jan. 15 - Mar. 12 Jan. 15 - Mar. 19 Jan. 15 - Mar. 26	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week
25 - 40°	Jan. 29	Feb. 19	Jan. 29 - Mar. 12 Jan. 29 - Mar. 19 Jan. 29 - Mar. 26	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week

BLOOM — MAY 28, 1962

40 - 50°	Jan. 29	Feb. 26	Jan. 29 - Mar. 19 Jan. 29 - Mar. 26 Jan. 29 - Apr. 2	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week
25 - 40°	Feb. 5	Feb. 26	Feb. 5 - Mar. 19 Feb. 5 - Mar. 26 Feb. 5 - Apr. 2	Mar. 19 Mar. 26 Apr. 3	10 Week 9 Week 8 Week

BLOOM — JUNE 4, 1962

25 - 50°	Feb. 12	Mar. 5	Feb. 12 - Mar. 26 Feb. 12 - Apr. 2 Feb. 12 - Apr. 9	Mar. 26 Apr. 2 Apr. 9	10 Week 9 Week 8 Week
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BLOOM — JUNE 11, 1962

25 - 50°	Feb. 19	Mar. 12	Feb. 19 - Apr. 2 Feb. 19 - Apr. 9 Feb. 19 - Apr. 16	Apr. 2 Apr. 9 Apr. 16	10 Week 9 Week 8 Week
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* For No Pinch Method: Plant and Light on Pinch Date



VARIETIES IN RESPONSE GROUPS

		10 WEEK	9 WEEK	8 WEEK
WHITE	S	Giant No. 4 Ind. White Crystal Queen Fred Shoesmith Columbia	Donlope's Wh. Sp. Queen's Lace	White Pink Chief Silver Sheen
	P	Sovereign Hurricane Ping Pong Iceberg Milady Cloudburst Dawnstar Coronado Illini Igloo Shasta Skyline Stardust Illini Snowdrift	Silvertone Cloudbank White Popcorn White Keepsake Pinocchio Alabaster Memento Halo Alaska Thistledown	Echo Blizzard Pristine
YELLOW	S	Imp. Ind. Yellow Ind. Gold Explorer Gol. Yel. Princess Anne No. 2 Yellow Queen No. 2 Yel. Shoesmith	Mecca Luyona Gold Lace	Blazing Gold Butterball
	P	Imperial Golden Bantam Yellow Beauregard No. 2 Yel. Iceberg Golden Crystal Jackstraw Golden Shasta Yellow Igloo Heyday Golden Stardust Yel. Ill. Snowdrift Fanfare	Yel. Silvertone Yel. Keepsake Gold Coast Happiness Sunup Sunbeam No. 2 Dandy Statesman Brilliance Yellowchip Starbright	Yellow Calumet Topflight
BRONZE & RED	S	Dk. Ind. Bronze Nomago Golden Gate Br. Princess Anne Copper Queen	Mrs. Palmero Symbol Fred Yule Chambrier	Amber Bright Mayford Titan
	P	Tuneful Bronze Delight Dillon Beauregard Wizard Giltglow Amberhue	Panorama Gaiety Buckskin Bronzechip Copperchip Tanfastic	Calumet Dark Calumet
PINK	S	Ind. Pink Princess Anne No. 2 Dark Queen	Bunbu Miss America	Pink Chief
	P	Delight Overture Portrait Pennant Excello Cheerful	Bluechip Pearl Chip Cherrychip Darkchip Tempo	Enterprise Accolade Mirth

S — Standard

P — Pompon

FAST DISBUDS AND FAST SPRAYS

Varieties suitable for this program include not only a number of popular standard types such as the Indianapolis group, but also numerous large flowered pompon, single, decoratives, and anemone types, which, when disbudded to one flower, result in three to four inch blooms, this being the size range that is generally sought for. Stem lengths generally range from 24 to 30 inches.

Why are They Becoming Popular?

First of all, they are distinctively beautiful and versatile in their use. The chrysanthemum, as is known in European floriculture, is devoted exclusively to these intermediate to large disbuds. It is thought that this method of culture partly resulted because the greatest percentage of flowers produced are purchased directly for home use. Thus, they can justifiably be called "Home-size-mums" with great future potential as we on the North American continent look forward to an expansion in our present home markets. The retail designer will use them to the same advantage as he does a carnation or a snapdragon because of their individuality in arrangement, but will favor the disbudded mum because of its rigid durability both in handling and in keeping qualities.

Efficient Croppers and Money Makers for the Producer

The schedule allows for approximately 3 and 1/3 crops to be produced on a given bench area within a 52-week period which will produce a total of 36 to 40 individual flowers per sq. ft. As markets are both developed and educated to absorb these shorter stemmed disbuds, even greater efficiencies in reducing total crop time will be possible.

How are They Grown?

Spacing—Allowing a minimum of 12 sq. inches for each flowering stem during the higher light periods of the year ranging to a maximum of 15 to 18 sq. inches per stem during the lowest and poorest light periods, has been found to be sufficiently adequate to produce this crop.

Since this crop is to be pinched, the recommendation is to plant either 4" x 6" apart and prune each plant to two stems or plant 6" x 6" and prune each plant to three stems.

Optimum grade uniformity is generally achieved by permitting only two stems to remain on each plant. This procedure is specifically recommended when the large standard types of

mums (Indianapolis, etc.) are to be grown in this fast schedule, whereas many of the intermediate type disbud varieties will readily support three stems per plant. Either method of handling will provide the same total production per given sq. ft. of bench area.



MARKET PACK OF FAST DISBUD

RECOMMENDED SPACING

Summer Flowering	6"x4"	Two stems per plant
Spring & Fall	6"x5"	Two stems per plant
Winter Flowering	6"x6"	Two stems per plant

Pruning—Selecting the two or three most uniformly vigorous shoots on each pinched plant and removing the remaining or extra breaks should be done at the earliest possible time. If growth is freely active, this pruning operation can be done 10 to 14 days after the pinch. Careless delay in the pruning operation will shorten the height of the crop below that which is normally possible with the given schedule.

Disbudding—Much like the pruning operation. In order to achieve maximum flower development and size, select the one flowering bud, usually the terminal bud, early, whenever the side buds are firm and can be rolled or snapped off easily.

Cultural Pointers—The principles of growing Fast Disbuds as related to soils, planting, fertilizing, temperature, water, insect and disease control, are essentially the same as are recommended and required in the production of a regular scheduled crop of either pompons or standards.



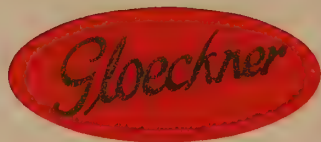
YEAR-ROUND FAST SCHEDULE

FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
April 24, 1961	Jan. 9	Feb. 6	Jan. 9 - Feb. 13 Jan. 9 - Feb. 20 Jan. 9 - Feb. 27	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week
May 1, 1961	Jan. 16	Feb. 13	Jan. 16 - Feb. 20 Jan. 16 - Feb. 27 Jan. 16 - Mar. 6	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week
May 8, 1961	Jan. 23	Feb. 20	Jan. 24 - Feb. 27 Jan. 24 - Mar. 6 Jan. 24 - Mar. 13	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week
May 15, 1961	Jan. 30	Feb. 20	Jan. 30 - Mar. 6 Jan. 30 - Mar. 13 Jan. 30 - Mar. 20	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week
May 22, 1961	Feb. 13	Mar. 6	Feb. 14 - Mar. 13 Feb. 14 - Mar. 20 Feb. 14 - Mar. 27	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week
May 29, 1961	Feb. 20	Mar. 13	Feb. 21 - Mar. 20 Feb. 21 - Mar. 27 Feb. 21 - Apr. 3	Mar. 20 Mar. 27 Apr. 3	10 Week 9 Week 8 Week
June 5, 1961	Mar. 6	Mar. 27	Mar. 6 - Mar. 27 Mar. 6 - Apr. 3 Mar. 6 - Apr. 10	Mar. 27 Apr. 3 Apr. 10	10 Week 9 Week 8 Week
June 12, 1961	Mar. 13	Apr. 3	Mar. 13 - Apr. 3 Mar. 13 - Apr. 10 Mar. 13 - Apr. 17	Apr. 3 Apr. 10 Apr. 17	10 Week 9 Week 8 Week
June 19, 1961	Mar. 20	Apr. 10	Mar. 20 - Apr. 10 Mar. 20 - Apr. 17 Mar. 20 - Apr. 24	Apr. 10 Apr. 17 Apr. 24	10 Week 9 Week 8 Week
June 26, 1961	Mar. 27	Apr. 17	Mar. 27 - Apr. 17 Mar. 27 - Apr. 24 Mar. 27 - May 1	Apr. 17 Apr. 24 May 1	10 Week 9 Week 8 Week

VARIETIES IN RESPONSE GROUPS

	10 WEEK	9 WEEK	8 WEEK
WHITE	Ind. White Imp. Ind. White Ind. No. 3 White Iceberg Ensign	Silver Bow Marblehead Donlope's White Spider Queen's Lace	White Pink Chief
YELLOW	Imp. Ind. Yellow Golden Yel. Princess Anne Cream Yel. Princess Anne Explorer Yellow Iceberg	Golden Herald Yellow Bow Luyona Gold Lace Yellow Ivanhoe	Harvest Golden Celestra
BRONZE & RED	Ind. Bronze Dark Ind. Bronze Daybreak Golden Gate Bronze Princess Anne	Dorothy Hyde Sundown Symbol Duchess Fred Yule	Amber Bright Mayford Titan
PINK	Ind. Pink Vanguard Southdown Pink Plum Princess Anne Bluebird Rosamund	Blue Ribbon Bunbu Mary Garden Miss America	Pink Chief



YEAR-ROUND FAST SCHEDULE

FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
July 3, 1961	Apr. 3	Apr. 24	Apr. 3 - Apr. 24 Apr. 3 - May 1 Apr. 3 - May 8	Apr. 24 May 1 May 8	10 Week 9 Week 8 Week
July 10, 1961	Apr. 10	May 1	Apr. 10 - May 1 Apr. 10 - May 8 Apr. 10 - May 15	May 1 May 8 May 15	10 Week 9 Week 8 Week
July 17, 1961	Apr. 17	May 8	Apr. 17 - May 8 Apr. 17 - May 15 Apr. 17 - May 22	May 8 May 15 May 22	10 Week 9 Week 8 Week
July 24, 1961	Apr. 24	May 15	Apr. 24 - May 15 Apr. 24 - May 22 Apr. 24 - May 29	May 15 May 22 May 29	10 Week 9 Week 8 Week
July 31, 1961	May 1	May 15	No	May 22 May 29 June 5	10 Week 9 Week 8 Week
August 7, 1961	May 8	May 22	No	May 29 June 5 June 12	10 Week 9 Week 8 Week
August 14, 1961	May 15	May 29	No	June 5 June 12 June 19	10 Week 9 Week 8 Week
August 21, 1961	May 22	June 5	No	June 12 June 19 June 26	10 Week 9 Week 8 Week
August 27, 1961	May 29	June 12	No	June 19 June 26 July 3	10 Week 9 Week 8 Week

VARIETIES IN RESPONSE GROUPS

	10 WEEK	9 WEEK	8 WEEK
WHITE	Ind. White Imp. Ind. White Ind. No. 3 White Ensign	Silver Bow Marblehead Donlope's White Spider Queen's Lace Themesong White Mary Garden	White Pink Chief
YELLOW	Imp. Ind. Yellow Ind. Gold Luxury Golden Yel. Princess Anne Cream Yel. Princess Anne	Golden Herald Yel. Marblehead Yellow Bow Luyona Gold Lace Yellow Ivanhoe	Celestra
BRONZE & RED	Daybreak Golden Gate Bronze Princess Anne	Symbol Sundown Fred Yule	Amber Bright
PINK	Vanguard Laughter Bluebird	Bunbu Miss America	



YEAR-ROUND FAST SCHEDULE

FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
September 4, 1961	June 5	June 19	No	June 26 July 3 July 10	10 Week 9 Week 8 Week
September 11, 1961	June 12	June 26	No	July 3 July 10 July 17	10 Week 9 Week 8 Week
September 18, 1961	June 19	July 3	No	July 10 July 17 July 24	10 Week 9 Week 8 Week
September 25, 1961	June 19	July 3	No	July 17 July 24 July 31	10 Week 9 Week 8 Week
October 2, 1961	June 26	July 10	No	July 24 July 31 Aug. 7	10 Week 9 Week 8 Week
October 9, 1961	July 3	July 17	No	July 24 July 31 Aug. 7	11 Week 10 Week 9 Week
October 16, 1961	July 3	July 17	No	July 31 Aug. 7 Aug. 14	11 Week 10 Week 9 Week
October 23, 1961	July 10	July 24	No	Aug. 7 Aug. 14 Aug. 21	11 Week 10 Week 9 Week

VARIETIES IN RESPONSE GROUPS

	11 WEEK	10 WEEK	9 WEEK	8 WEEK
WHITE	Ermine John Baumann	Ind. White Imp. Ind. White Ind. No. 3 White Iceberg Ensign	Silver Bow Marblehead Donlope's Wh. Spider Queen's Lace Themesong	White Pink Chief
YELLOW	Shane Sultan	Imp. Ind. Yellow Explorer Yellow Iceberg Golden Yel. Princess Anne Cream Yel. Princess Anne	Golden Herald Yellow Bow Luyona Gold Lace Yellow Ivanhoe	Harvest Golden Celestra
BRONZE & RED	Valentine Olnura Tan Vedova	Ind. Bronze Dark Ind. Bronze Daybreak Woking Scarlet Golden Gate Bronze Princess Anne	Symbol Fred Yule Ivanhoe Chambrier Duchess	Amber Bright
PINK	Vedova Venoya Thanks. Pink	Ind. Pink Vanguard Southdown Pink Plum Bluebird Princess Anne Rosamund	Bunbu Mary Garden Miss America	Pink Chief



YEAR-ROUND FAST SCHEDULE

FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
October 30, 1961	July 17	July 31	No No	Aug. 14 No	11 Week 10 Week
November 6, 1961	July 17	July 31	No Aug. 1 - Aug. 28	Aug. 21 No	11 Week 10 Week
November 13, 1961	July 24	Aug. 7	No No Aug. 1 - Sept. 4	Aug. 21 No No	12 Week 11 Week 10 Week
November 20, 1961	July 31	Aug. 14	No Aug. 7 - Sept. 4 Aug. 1 - Sept. 11	No No No	12 Week 11 Week 10 Week
November 27, 1961	Aug. 7	Aug. 21	Aug. 14 - Sept. 4 Aug. 7 - Sept. 11 Aug. 7 - Sept. 18	No No No	12 Week 11 Week 10 Week
December 4, 1961	Aug. 7	Aug. 21	Aug. 14 - Sept. 11 Aug. 7 - Sept. 18 Aug. 7 - Sept. 25	No No No	12 Week 11 Week 10 Week
December 11, 1961	Aug. 14	Sept. 4	Aug. 14 - Sept. 18 Aug. 14 - Sept. 25 Aug. 14 - Oct. 2	No No No	12 Week 11 Week 10 Week
December 18, 1961	Aug. 14	Sept. 4	Aug. 14 - Sept. 25 Aug. 14 - Oct. 2 Aug. 14 - Oct. 9	No No No	12 Week 11 Week 10 Week
December 25, 1961	Aug. 21	Sept. 11	Aug. 21 - Oct. 2 Aug. 21 - Oct. 9 Aug. 21 - Oct. 16	No No No	12 Week 11 Week 10 Week

VARIETIES IN RESPONSE GROUPS

	12 WEEK	11 WEEK	10 WEEK
WHITE	Imp. White Peter John Champ White Valencia December Glory	White Norma Ermine John Baumann	Imp. Ind. White Ind. No. 3 White
YELLOW	Yellow Peter John No. 2 Yellow Glory Yellow Valencia	Shane Sultan	Imp. Ind. Yellow Ind. Yellow Nightingale
BRONZE & RED	Imp. Bronze Peter John Apricot Valencia Crimson Valencia	Valentine Olnura Tan Vedova	Ind. Bronze Dark Ind. Bronze Woking Scarlet
PINK	Pink Peter John Royal Valencia	Vedova Venoya Thanks. Pink	Ind. Pink Southdown Pink Plum Laughter



YEAR-ROUND FAST SCHEDULE

FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	LIGHTING PERIOD	SHADE	RESPONSE GROUP
January 1, 1962	Aug. 28	Sept. 18	Aug. 28 - Oct. 9 Aug. 28 - Oct. 16 Aug. 28 - Oct. 23	No No No	12 Week 11 Week 10 Week
January 8, 1962	Sept. 4	Sept. 25	Sept. 4 - Oct. 16 Sept. 4 - Oct. 23 Sept. 4 - Oct. 30	No No No	12 Week 11 Week 10 Week
January 15, 1962	Sept. 11	Oct. 2	Sept. 11 - Oct. 23 Sept. 11 - Oct. 30 Sept. 11 - Nov. 6	No No No	12 Week 11 Week 10 Week
January 22, 1962	Sept. 18	Oct. 9	Sept. 18 - Oct. 30 Sept. 18 - Nov. 6 Sept. 18 - Nov. 13	No No No	12 Week 11 Week 10 Week
January 29, 1962	Sept. 25	Oct. 16	Sept. 25 - Nov. 6 Sept. 25 - Nov. 13 Sept. 25 - Nov. 20	No No No	12 Week 11 Week 10 Week
February 5, 1962	Oct. 2	Oct. 23	Oct. 2 - Nov. 13 Oct. 2 - Nov. 20 Oct. 2 - Nov. 27	No No No	12 Week 11 Week 10 Week
February 12, 1962	Oct. 9	Oct. 30	Oct. 9 - Nov. 20 Oct. 9 - Nov. 27 Oct. 9 - Dec. 4	No No No	12 Week 11 Week 10 Week
February 19, 1962	Oct. 16	Nov. 6	Oct. 16 - Nov. 27 Oct. 16 - Dec. 4 Oct. 16 - Dec. 11	No No No	12 Week 11 Week 10 Week
February 26, 1962	Oct. 23	Nov. 13	Oct. 23 - Dec. 4 Oct. 23 - Dec. 11 Oct. 23 - Dec. 18	No No No	12 Week 11 Week 10 Week

VARIETIES IN RESPONSE GROUPS

	12 WEEK	11 WEEK	10 WEEK
WHITE	Imp. White Peter John Champ Illini Glacier	White Norma Ermine John Baumann	Imp. Ind. White Ind. No. 3 White
YELLOW	Yellow Peter John No. 2 Yellow Glory	Shane	Ind. Yellow Imp. Ind. Yellow Luyona
BRONZE & RED	Imp. Bronze Peter John	Valentine Olnura Tan Vedova	Ind. Bronze Dark Ind. Bronze Woking Scarlet
PINK	Pink Peter John Royal	Vedova Venoya Thanks. Pink	Ind. Pink Rosamund Laughter



YEAR-ROUND FAST SCHEDULE

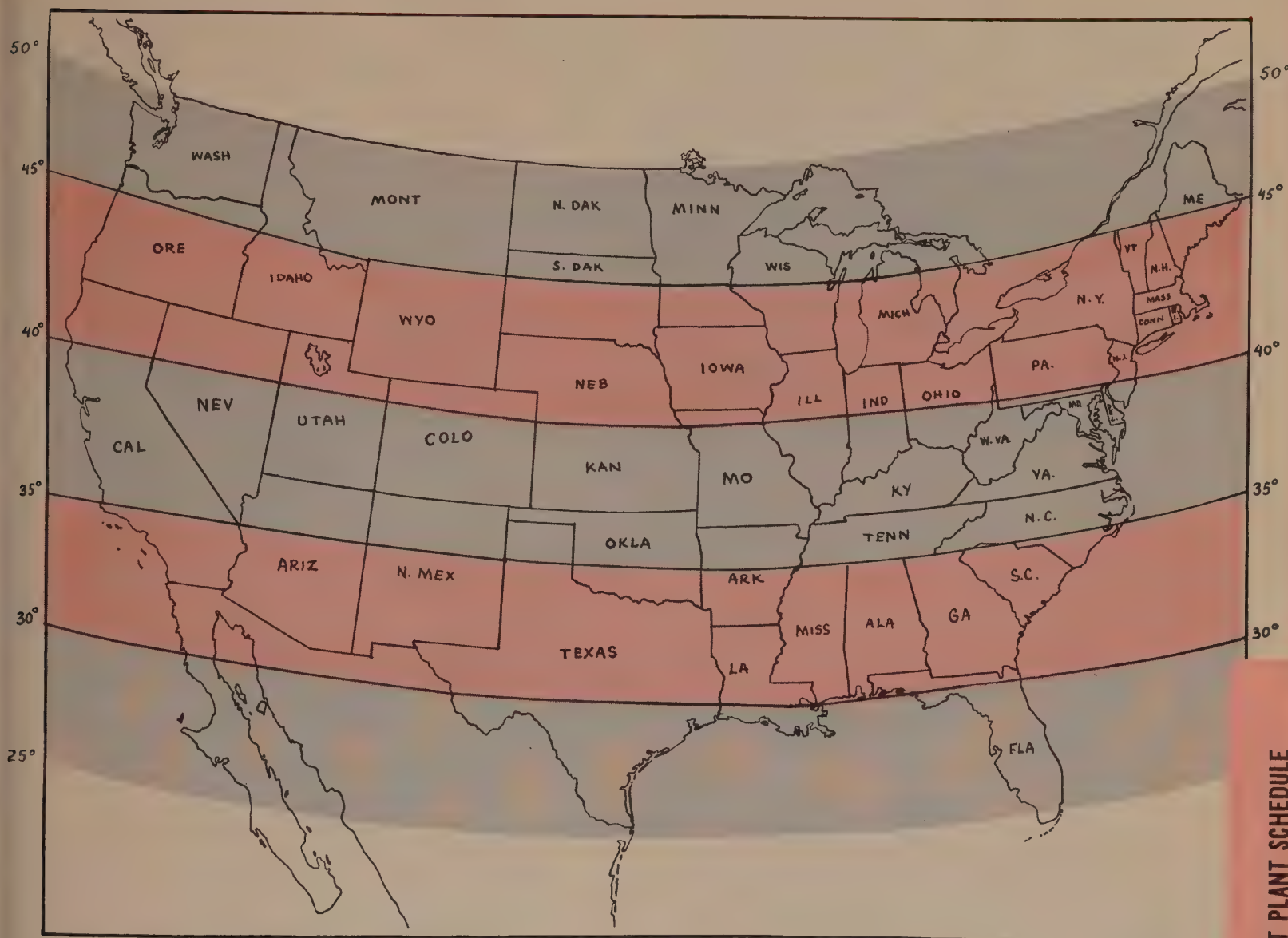
FAST DISBUDS AND FAST SPRAYS

FLOWER	PLANT	PINCH	LIGHTING PERIOD	START SHADE	RESPONSE GROUP
March 5, 1962	Oct. 30	Nov. 20	Oct. 30 - Dec. 18 Oct. 30 - Dec. 25 Oct. 30 - Jan. 1	No No No	11 Week 10 Week 9 Week
March 12, 1962	Nov. 6	Dec. 4	Nov. 6 - Dec. 25 Nov. 6 - Jan. 1 Nov. 6 - Jan. 8	No No No	11 Week 10 Week 9 Week
March 19, 1962	Nov. 13	Dec. 11	Nov. 13 - Jan. 1 Nov. 13 - Jan. 8 Nov. 13 - Jan. 15	No No No	11 Week 10 Week 9 Week
March 26, 1962	Nov. 27	Dec. 25	Nov. 27 - Jan. 8 Nov. 27 - Jan. 15 Nov. 27 - Jan. 22	No No No	11 Week 10 Week 9 Week
April 2, 1962	Dec. 4	Jan. 1	Dec. 4 - Jan. 22 Dec. 4 - Jan. 29 Dec. 4 - Feb. 5	No No No	10 Week 9 Week 8 Week
April 9, 1962	Dec. 18	Jan. 15	Dec. 18 - Jan. 29 Dec. 18 - Feb. 5 Dec. 18 - Feb. 12	No No No	10 Week 9 Week 8 Week
April 16, 1962	Dec. 25	Jan. 22	Dec. 25 - Feb. 5 Dec. 25 - Feb. 12 Dec. 25 - Feb. 19	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week
April 23, 1962	Jan. 8	Feb. 5	Jan. 8 - Feb. 12 Jan. 8 - Feb. 19 Jan. 8 - Feb. 26	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week
April 30, 1962	Jan. 15	Feb. 12	Jan. 15 - Feb. 19 Jan. 15 - Feb. 26 Jan. 15 - Mar. 5	Mar. 19 Mar. 26 Apr. 2	10 Week 9 Week 8 Week

VARIETIES IN RESPONSE GROUPS

	11 WEEK	10 WEEK	9 WEEK	8 WEEK
WHITE	White Norma Ermine John Baumann	Ind. White Imp. Ind. White Ind. No. 3 White Iceberg	Donlope's Wh. Spider Queen's Lace	White Pink Chief
YELLOW	Shane	Imp. Ind. Yellow Yellow Iceberg Chairman Golden Yel. Princess Anne Cream Yel. Princess Anne	Luyona Gold Lace	
BRONZE & RED	Valentine Olnura Tan Vedova	Dark Ind. Bronze Daybreak Woking Scarlet Golden Gate Bronze Princess Anne Apricot Princess Anne	Duchess Chambrier	Amber Bright Mayford Titan
PINK	Vedova Venoya	Ind. Pink Southdown Pink Plum Laughter Princess Anne Rosamund	Blue Ribbon Bunbu Dark Ribbon	Pink Chief

YEAR-ROUND FLOWERING OF CHRYSANTHEMUM



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STANDARDS IN SARAN HOUSE PROTECTED WITH POLYETHYLENE AFTER COLOR DEVELOPED

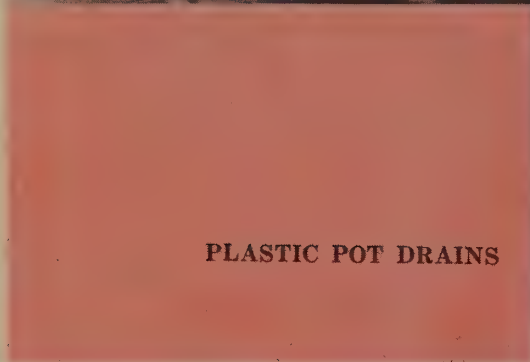


THE MAP ABOVE WILL ASSIST YOU IN LOCATING THE LATITUDE IN WHICH YOUR GREENHOUSE IS LOCATED. YOU NEED THIS INFORMATION TO USE THE FLOWERING SCHEDULES THAT FOLLOW ON THE NEXT PAGES.

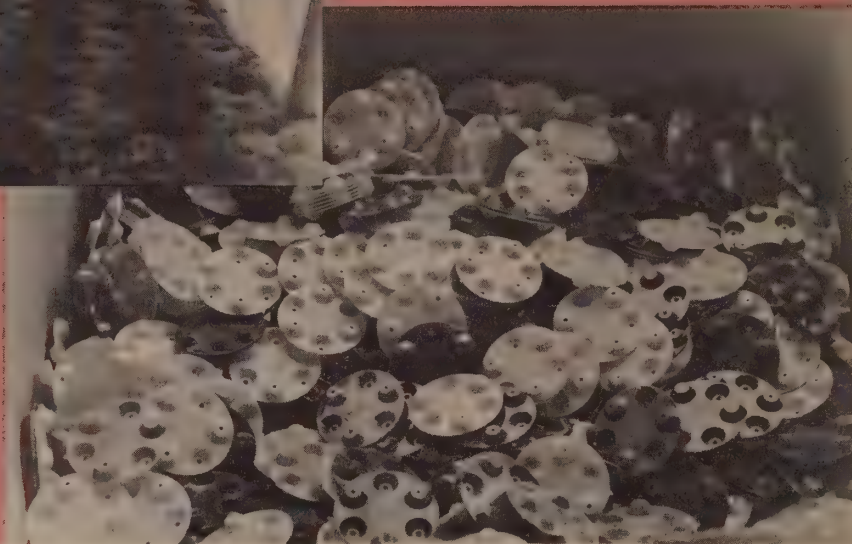
CHRYSANTHEMUM POT PLANT CULTURE



TEMPORARY CHEESECLOTH
SHELTER NEWLY
PLANTED CUTTINGS



PLASTIC POT DRAINS



SOIL

A good fibrous silt loam from the field, to which one-third to one-half of well rotted manure or German peat has been added, plus an application of superphosphate or a low nitrogen, complete fertilizer will give excellent results. In areas where such soil is not available a heavier soil may be improved by additions of sand or perlite to the soil. Since perlite holds large quantities of air, and moisture, a little experimentation will usually show the correct mixture. Remember there is no fertilizer program available that can pro-

duce vigorous growth and the desirable dark green luster on the foliage if the soil does not provide sufficient aeration. Some growers are getting quicker root action by using a top dressing of one-half inch of German peat over their regular soil mixture in each pot and planting through this mulch. It saves on watering and assists in producing more breaks after pinching.

In many areas peanut hulls, sawdust or wood shavings are excellent alternate sources of organic matter. With these, additional nitrogen feeding is necessary at the beginning of the crop.

WATERING AND HUMIDITY

Cuttings should always be planted in soil that has been uniformly moistened, either by sterilization or nautral wetting. Some growers prepare pots a day ahead to assure the correct level of moisture in each pot prior to planting. After planting, water thoroughly to set the soil around the roots. The additions of peat and perlite to the original soil will improve water retention and help eliminate extreme fluctuations in moisture supply. Chrysanthemum plants can be overwatered as easily as poinsettia plants. Overwatering results in the death of roots and the yellowing of foliage. The variety of Oregon is used by some growers as an indicator, since it shows these symptoms quickly. In order to assure adequate moisture and humidity prior to pinching and during the lighting period, many growers place cuttings under intermittent mist after potting. This eliminates initial watering and assists in developing more and stronger breaks. With this system no supplemental shading is necessary on young plants.

CHRYSANTHEMUM POT PLANT CULTURE

For best results grow all potted chrysanthemum under glass. Do not shade the glass any more than necessary. Usually a light shade is necessary in midsummer and particularly on plants approaching the finishing stages. Shade on the glass is more for the comfort of the grower, than for the requirements of the plants. Maintain humidity in the house by wetting down benches and walks.



AMPLE SPACE BETWEEN POTS IS NECESSARY

FERTILIZING

The foliage should retain a bright green luster throughout the life of the plants. The lower leaves should never be allowed to become pale green as a result of low fertility. A strong, well-grown pot plant is a well-fed plant. Pot plants should be fed more frequently than those grown in a bench, as constant leaching lowers the nutrient level in pots faster than in bench culture.

Liquid fertilizers are very effective. Constant fertilization by means of injecting small quantities of fertilizer into the water line has eliminated the tendency to fluctuate the quantities of fertilizer available to the plant. Fertilizing every time the plants are watered with a **Fert-O-Ject** has proved to be a reliable method of maintaining desirable fertility levels. Tests at Ohio State University confirmed this. The most desirable growth was secured when plants were fertilized with 1 ounce of 20-20-20 to 15 gallons of water each time they were watered. With this system young cuttings may be watered-in with the same solution as that used on older, established plants.

When an injection system is not available, regular weekly feedings with liquid fertilizer are recommended. The last fertilizing is as important as the first one. In many cases pot mums not having correct fertility at finishing time lack keeping quality. This is especially true if the pot has not had adequate fertility levels maintained during the growing period.



SOFT PINCHING
INCREASES NUMBER
OF BREAKS



SCISSORS ARE IDEAL FOR
SOFT PINCHING

REMOVING JUST THE GROWING TIP

CHRYSANTHEMUM POT PLANT CULTURE

TEMPERATURE

The optimum night temperature is 65 degrees F. Day temperatures should be 75 to 85 degrees F. when the light intensity is high and 70 degrees F. on cloudy days. Heat delay occurs when night temperatures reach 90 degrees or higher. This condition is similar to the check that results when plants are removed from the short-day treatment too early, when black cloth treatment is missed too often, or when old shading cloth is used.

Some of the delay may be overcome by placing black cloth over the plants with as much headroom as possible to increase air movement under the cloth. Ground beds with cloth placed 6 feet above pots is satisfactory. The only positive method to overcome this heat check is to install air conditioning to lower the temperatures. Where this is not possible, variety selection is extremely important.

Growing the crop at less than 65 degrees F. night temperature results in uneven and delayed flowering. A gradual temperature drop to 55 degrees F. after buds show color is recommended for most colored varieties.

Extreme fluctuation of night temperatures above 65 degrees F., and below 54 degrees F. will retard flowering especially in the later stages of bud development.

SHADING AND DISBUDDING

Use the same procedure as for cut flowers. Black cloth treatment should continue until disbudding.

The time of disbudding pot mums must be stressed. Late disbudding produces a shock to the plant that can affect flower size, timing and color. Several days delay in disbudding is equal to more than several days delay in flowering during high temperature periods of the year. Generally it is necessary to make two passes at disbudding; the first is made as soon as the terminal bud cluster has opened enough to permit side-bud removal without injury to the terminal bud. The second disbudding removes any lateral shoots that are stimulated into growth after removal of the first set of side buds. The commonly used garden varieties are not disbudded when they are used for Easter and Mothers' Day pots since the flower size is not large enough to make a show, and the beauty lies in the number of flowers contained on the bushy plants.

PLANTING AND PINCHING

Planting only those cuttings directly into the pots which have been graded for height and stem

BLACK CLOTH TRAVELS ON A SERIES OF WOODEN CROSS PIECES SUSPENDED BY HOOKS ON TWO LENGTHWISE CABLES



CHRYSANTHEMUM POT PLANT CULTURE

diameter is the beginning of top quality pots. Uneven growth resulting from differences in cuttings within a pot is not easily corrected in the later stages of growing. Deep planting results in greater susceptibility to Rhizoctonia and Pythium. Uneven planting depths among cuttings within a pot also will produce uneven growth responses within the same pot. It is better to plant cuttings in a circle around the pot rather than the four with one in the center. Planting cuttings on an angle generally increases the number of breaks that develop from the initial pinch. Failure to achieve the proper number of strong breaks from the first pinch often can be traced to pinching plants which were not vigorously growing at time of that pinch. Frequently the clue to this trouble is the number of plants that require an additional pinch because the first pinch simply removed a portion of the leaf rather than the entire growing tip. If active growth does not occur, and the schedule calls for a pinch, it would be better to delay the pinch, until the plant has made sufficient new growth. The slight delay in flowering time is insignificant compared to the reduction in quality that results from improper pinching.

Hard pinches on actively growing plants often reduces the number of breaks. No more than $\frac{1}{2}$ inch of stem tip should be removed from the plant when pinching, and best results occur when the tip is simply "rolled out." The pinch should be made only on growth that has occurred in your greenhouse. The accompanying photographs illustrate this technique.

The use of intermittent mist on plants in the early stages helps to establish cuttings rapidly, and breaking action is improved.

SINGLE STEM METHOD

Plant 7 or 8 cuttings per 6-inch pot or 10 to 15 cuttings per 8-inch pot making sure they are uniformly graded prior to planting. Do not pinch. This permits a saving of one to three weeks growing time over the pinch method. Disbud to one bud per plant as early as possible. Total growing time is approximately equal to response classification of the variety. One advantage of the single-stem method crop is the increase of one more crop per year over the pinched crop system. Blooms will be very large and the stems will be much stronger than with pinched plants. Varieties recommended for single stem culture are: Malou, Mrs. Wolfe, Princess Anne, Clipper, Loubens, Cossack, Red Star, Vulcan and Perle Angevine.

In the past it has been difficult to control the height on some vigorously growing varieties. A new chemical called Phosphon D which is non-toxic to the plants and is mixed into the potting soil prior to planting has given satisfactory control of height. Phosphon D can control the height of plants of large flowering standard varieties such as Indianapolis when grown single stem. Phosphon D does not affect the size of the flowers but may delay flowering slightly.



SPACE SAVER: POT MUMS TEMPORARILY SPACED OUT BETWEEN ROWS OF NEWLY PLANTED CUT MUMS, WITH "HI-LITE" OR "DOUBLE-ROW" SYSTEM



CHRYSANTHEMUM POT PLANT CULTURE

SINGLE-PINCH METHOD

Considered the standard method, this system produces a mass of flowers on stocky plants. Plant 5 or 6 rooted cuttings per 6-inch pot. Roll-pinch the plants in the soft growth according to the schedule found in the year-round program.

TIMING PINCH AND SHORT DAYS

In most localities the desirable height of the finished pot is between 17 to 20 inches overall. In order to achieve this height it is necessary to vary the pinch in relation to the beginning of short days according to each variety. All varieties are classed by their natural growing habits.

TALL GROWING VARIETIES (varieties naturally flowering on stems 15 inches and over after short days have been applied.)

Treatment: Short days applied 10 to 14 days prior to pinching to reduce height. (Example: Snow Crystal)

MEDIUM GROWING VARIETIES (varieties which naturally flower on stems no longer than 15 inches after short days have been applied.)

Treatment: Short days applied the date of pinching to maintain natural height. (Example: Bonaffon Deluxe)

SHORT GROWING VARIETIES (varieties which naturally flower on stems under 15 inches after short days have been applied.)

Treatment: Short days applied after 7 to 14 long days following pinch have occurred to promote the additional stem growth needed. (Example: Delaware)

The year around schedule in this manual takes the above into consideration so that all plants should finish at approximately the same height. Seasonal variations occur — check with your Gloeckner representative before scheduling your program.

TWO-PINCH METHOD

The most common method a few years ago and still used some for natural bloom, especially where larger plants are wanted. Plant 4 cuttings per 6-inch pots; 5 per 7-inch, or 7 in 8 inch pots. Pinch plants the first time 14 days after planting and wait 21 days and pinch the second time. Short-day treatment should start at the time of the second pinch.

PREMIUM POT MUMS

The trend in recent years toward smaller, less expensive pot mums to move through merchandising channels has resulted in neglecting some

good higher-priced business in many localities. To regain this trade a few growers are now producing heavy, 8 inch pots the year around, using chiefly single-stem Indianapolis varieties. The accompanying illustration shows what can be done with these, in contrast to the usual 6 inch pinched pots. Some retail shops are now regular weekly and holiday buyers, where these choice pots have become a standard, available item.

The economics are as follows: cutting cost per pot of 8" is about three times that of pinched 6", using 15 cuttings instead of 5. However, the selling price has been approximately double, consistently. In the various growing stages a bench will take two thirds as many 8" as 6". Since the 8" single-stem Indianapolis are put under short-day treatment immediately after planting, they are ready to sell in 9 to 10 weeks; this in contrast to 11 to 13 weeks for average 6" pinched pots. No tranquilizers are used, but it is desirable to run somewhat on the dry side in the early stages to prevent damping off of those cuttings planted in the center of the large soil mass in 8" pots.

SOME COMMON ERRORS

1. GROWING UNDER TOO MUCH SHADE OR CROWDING PLANTS. During low light intensity periods of the year a minimum of 1 1/3 square feet per 6-inch pot is required to finish a quality pot. Some larger growing varieties require more space. Crowding results in spindlier plants, increased susceptibility to foliage and flower diseases, reduction in keeping quality, and yellowing and loss of lower foliage. Often these plants must be staked before they can be transported to the market.



FOR THE "CARRIAGE TRADE"
SINGLE STEM INDIANAPOLIS
8" POTS (RIGHT) CONTRASTED WITH
6" PINCHED OREGON

CHRYSANTHEMUM POT PLANT CULTURE

Excessive shading from dirty glass or too much shading compound will produce similar results. Crowding or excessive shading produces a carbohydrate-deficient plant. **DON'T CROWD POT MUMS!**

2. Loss of Root System:

The early loss of roots often causes a severe check resulting in the production of sub-standard pot mums. Frequently the check is not uniform within a pot causing the pot to be noticeably uneven. This is especially true if the loss is caused by excess fertilizer applications.

(a) By Excess Fertilizers

When excessively high soluble salt concentrations build up in the pots, both leaves and roots can be injured. Leaf margin burning is an expression of this damage.

Next to crowding, more pots are reduced in quality from excess fertilizer applications than any other cause.

(b) By overwatering

Overwatering usually resulting from lack of proper drainage can cause loss of roots. Plunged pots are more easily overwatered than non-

plunged and for that reason the bench on which plunging is being done should have excellent drainage.

3. Failure to disbud promptly:

Varieties differ in their response to late disbudding but generally the results are late flowering, color loss, and in some cases, ragged foliage resulting from injury incurred during disbudding procedure. Late disbudding on single-stem crops can contribute to undesirable height of finished plants and marked reductions in flower size and color.

4. Root pruning resulting in loss of keeping quality:

This type of injury most often occurs where plants are grown plunged until flowering and have not been turned regularly to maintain a root system within the pot. Plants that have been root-pruned are not able to maintain proper internal moisture relationship even when soil is wet. Frequently the buyer of such plants will complain of short life and the necessity of watering too often. Root-pruned plants will become nitrogen deficient very rapidly which also contributes to the lowering of general appearance and keeping quality of the pot.



BLACK-CLOTHING AN ENTIRE HOUSE IN ONE OPERATION



CHRYSANTHEMUM POT PLANT CULTURE

Garden Mum Pot Plants for Mother's Day

Garden mum plants in full bloom make ideal potted plants for Mother's Day. This should be a valuable addition to the list of spring pot plants. For best results, 5 cuttings should be planted in a 6-inch pot or 2 cuttings in a 4-inch pot. After these pot plants are through flowering, they should be cut back to within 3 inches of the soil

level and planted into the garden. These same plants will bloom again in the fall.

Many growers have greatly increased their sale of garden chrysanthemums by having collections in bloom during the spring season. Cuttings are planted one to a 3-inch or 3½-inch pot using the procedure outlined below for Single-Pinch Method.

SINGLE - PINCH METHOD†

		BLOOM	PLANT	LIGHTING PERIOD	PINCH	SHADE
EASTER	1961	APRIL 2	JAN. 9	JAN. 9 - JAN. 19	JAN. 19	NO
	1962	APRIL 22	FEB. 5	FEB. 5 - FEB. 19	FEB. 19	NO
MOTHER'S DAY	1961	MAY 14	FEB. 27	FEB. 27 - MAR. 13	MAR. 13	APR. 3
	1961*	MAY 14	MAR. 6	NO	MAR. 20	NO
	1962	MAY 13	FEB. 26	FEB. 26 - MAR. 12	MAR. 12	APR. 2
	1962*	MAY 13	MAR. 5	NO	MAR. 19	NO
DECORATION DAY	1961	MAY 30	MAR. 13	MAR. 13 - MAR. 27	MAR. 27	APR. 3
	1961*	MAY 30	MAR. 20	NO	MAR. 27	NO
	1962	MAY 30	MAR. 12	MAR. 12 - MAR. 26	MAR. 26	APR. 2
	1962*	MAY 30	MAR. 19	NO	MAR. 26	NO

† For double-pinch method plant five weeks earlier and give first pinch seven days after planting. The second pinch should be made on the pinch date given in the single-pinch method. Be sure to light from the date of planting until date of second pinch.

*No light no shade method.

VARIETIES:

WHITE

DIAMOND
CHRIS COLUMBUS
OSTOSA
LARRY
JESSAMINE WILLIAMS
JOAN-ETTE

YELLOW

YELLOW CHRIS COLUMBUS
ASTORIA
KINGS RANSOM
YELLOW SPOON
GAY BLADE
ETHEL WATERS

BRONZE & RED

DOLLI-ETTE
TORONTO
LIPSTICK
RADIANCE
MINNIHAHA
MESABI
RED MISCHIEF
CHEYENNE
CAPRICE
ZEST

PINK

ANN LAJYGO
SPELLBOUND
MISCHIEF
JOYBRINGER
ALERT
FUCHSIA FAIRY
RASPBERRY ICE
MINNPINK
PURPLE WATERS
CECELIA
ROYAL-ETTE
#2 FUCHSIA FAIRY



YEAR-ROUND POT PLANT SCHEDULE

**Bloom
Apr. 10
1961**

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
S Bonnaffon Deluxe S Clipper S Charm	Jan. 2	Jan. 2 - Jan. 23	Jan. 23	Mar. 13
S Oregon S Yellow Delaware S Delaware S Mermaid	Jan. 2	Jan. 2 - Jan. 30	Jan. 23	Mar. 20
S Chalk Cliff S Scepter S Red Star S Red Humdinger S Criterion S Personality S Humdinger	Jan. 9	Jan. 9 - Jan. 30	Jan. 30	Mar. 20
S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Jan. 9	Jan. 9 - Feb. 6	Jan. 30	No
S Ind. Varieties S Ice Follies S Snow Crystal S Queen's Lace S Golden Crystal S Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Princess Anne S Pink Deluxe	Jan. 16	Jan. 16 - Jan. 30	Feb. 6	Mar. 20
Monty Quicksilver Snowclad Luna Sundial Dark Ribbon Queen of Pinks	Jan. 16	Jan. 16 - Feb. 6	Feb. 6	No
Bridesmaid	Jan. 23	Jan. 23 - Feb. 6	Feb. 13	No
Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Jan. 23	Jan. 23 - Feb. 13	Feb. 13	No
Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Jan. 30	Jan. 30 - Feb. 20	Feb. 20	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates

YEAR-ROUND POT PLANT SCHEDULE

Bloom Apr. 17 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Bonnaffon Deluxe Clipper Charm	Jan. 9	Jan. 9 - Jan. 30	Jan. 30	Mar. 13
	S Oregon Yellow Delaware Delaware Mermaid	Jan. 9	Jan. 9 - Feb. 6	Jan. 30	Mar. 20
	S Chalk Cliff Scepter Red Star Red Humdinger Criterion Personality Humdinger	Jan. 16	Jan. 16 - Feb. 5	Feb. 6	Mar. 20
	S Granite State Wilson's White S Malou S Dark Wilson's Yellow	Jan. 16	Jan. 16 - Feb. 13	Feb. 6	Mar. 27
	S Ind. Varieties Ice Follies Snow Crystal Queen's Lace Golden Crystal Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Princess Anne S Pink Deluxe	Jan. 23	Jan. 23 - Feb. 6	Feb. 13	Mar. 20
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon Queen of Pinks	Jan. 23	Jan. 23 - Feb. 13	Feb. 13	Mar. 27
	Bridesmaid	Jan. 30	Jan. 30 - Feb. 13	Feb. 20	Mar. 27
	Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Feb. 6	Feb. 6 - Feb. 20	Feb. 20	No
	Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Feb. 13	Feb. 13 - Feb. 27	Feb. 27	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Apr. 24 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Bonnaffon Deluxe Clipper Charm	Jan. 16	Jan. 16 - Feb. 6	Feb. 6	Mar. 13
	S Oregon Yellow Delaware Delaware Mermaid	Jan. 16	Jan. 16 - Feb. 13	Feb. 6	Mar. 20
	S Chalk Cliff Scepter Red Star Red Humdinger Criterion Personality Humdinger	Jan. 23	Jan. 23 - Feb. 13	Feb. 13	Mar. 20
	S Granite State Wilson's White S Malou S Dark Wilson's Yellow	Jan. 23	Jan. 30 - Feb. 20	Feb. 13	Mar. 27
	S Ind. Varieties Ice Follies Snow Crystal Queen's Lace Golden Crystal Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Princess Anne S Pink Deluxe	Jan. 30	Jan. 30 - Feb. 13	Feb. 20	Mar. 20
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon Queen of Pinks	Feb. 6	Feb. 6 - Feb. 20	Feb. 20	Mar. 27
	Bridesmaid	Feb. 13	Feb. 13 - Feb. 20	Feb. 27	Mar. 27
	Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Feb. 13	Feb. 13 - Feb. 27	Feb. 27	Apr. 3
	Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Feb. 20	Feb. 20 - Mar. 6	Mar. 6	Apr. 10

S — For Single Stem Pots — Plant and Shade on Pinch Dates

YEAR-ROUND POT PLANT SCHEDULE

Bloom May 1 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Bonnaffon Deluxe S Clipper S Charm	Jan. 23	Jan. 23 - Feb. 13	Feb. 13	Mar. 13
	S Oregon S Yellow Delaware S Delaware S Mermaid	Jan. 23	Jan. 23 - Feb. 20	Feb. 13	Mar. 20
	S Chalk Cliff S Scepter S Red Star S Red Humdinger S Criterion S Personality S Humdinger	Jan. 30	Jan. 30 - Feb. 20	Feb. 20	Mar. 20
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Feb. 6	Feb. 6 - Feb. 27	Feb. 20	Mar. 27
	S Ind. Varieties S Ice Follies S Snow Crystal S Queen's Lace S Golden Crystal S Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Princess Anne S Pink Deluxe	Feb. 6	Feb. 6 - Feb. 20	Feb. 27	Mar. 20
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon Queen of Pinks	Feb. 13	Feb. 13 - Feb. 27	Feb. 27	Mar. 27
	Bridesmaid	Feb. 20	Feb. 20 - Feb. 27	Mar. 6	Mar. 27
	Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Feb. 20	Feb. 20 - Mar. 6	Mar. 6	Apr. 3
	Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Feb. 27	Feb. 27 - Mar. 13	Mar. 13	Apr. 10

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom
May 8
1961

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bonnaffon Deluxe Charm Blue Ridge	Jan. 30	Jan. 30 - Feb. 20	Feb. 20	Mar. 13
S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Jan. 30	Jan. 30 - Feb. 27	Feb. 20	Mar. 20
S Chalk Cliff Whiterion Jackstraw Scepter Red Star Red Humdinger Criterion Personality Humdinger Caress	Feb. 13	Feb. 13 - Feb. 27	Feb. 27	Mar. 20
S Ind. Varieties Ice Follies Snow Crystal Queen's Lace Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Gold Lace S Golden Gate S Br. Princess Anne S Princess Anne S Pink Deluxe	Feb. 20	Feb. 20 - Feb. 27	Mar. 6	Mar. 20
S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Feb. 13	Feb. 13 - Mar. 6	Feb. 27	Mar. 27
S Monty Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	Feb. 20	Feb. 20 - Mar. 6	Mar. 6	Mar. 27
Bridesmaid	Feb. 27	Feb. 27 - Mar. 6	Mar. 13	Mar. 27
Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Feb. 27	Feb. 27 - Mar. 13	Mar. 13	Apr. 3
Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Mar. 6	Mar. 6 - Mar. 20	Mar. 20	Apr. 10

S — For Single Stem Pots — Plant and Shade on Pinch Dates

VARIETY DESCRIPTION



YEAR-ROUND POT PLANT SCHEDULE

Bloom May 15 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	Bonnaffon Deluxe Charm Blue Ridge	Feb. 13	Feb. 13 - Feb. 27	Feb. 27	Mar. 13
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Feb. 13	Feb. 13 - Mar. 6	Feb. 27	Mar. 20
	S Chalk Cliff Whiterion Jackstraw Scepter Red Star Red Humdinger Criterion Personality Humdinger Caress	Feb. 20	Feb. 20 - Mar. 6	Mar. 6	Mar. 20
	S Ind. Varieties Ice Follies Snow Crystal Queen's Lace Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Gold Lace S Golden Gate S Br. Princess Anne S Princess Anne S Pink Deluxe	Feb. 27	Feb. 27 - Mar. 6	Mar. 13	Mar. 20
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Feb. 20	Feb. 20 - Mar. 13	Mar. 6	Mar. 26
	S Monty Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	Feb. 27	Feb. 27 - Mar. 13	Mar. 13	Mar. 27
	Bridesmaid	Mar. 6	Mar. 6 - Mar. 13	Mar. 20	Mar. 27
	Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Mar. 6	Mar. 6 - Mar. 20	Mar. 20	Apr. 3
	Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Mar. 13	Mar. 13 - Mar. 27	Mar. 27	Apr. 10

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom May 22 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	Bonnaffon Deluxe Charm Blue Ridge	Feb. 20	Feb. 20 - Mar. 6	Mar. 6	Mar. 13
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Feb. 20	Feb. 20 - Mar. 13	Mar. 6	Mar. 20
	Chalk Cliff Whiterion Jackstraw Scepter S Red Star Red Humdinger Criterion Personality Humdinger Caress	Feb. 27	Feb. 27 - Mar. 13	Mar. 13	Mar. 20
	S Ind. Varieties Ice Follies Snow Crystal Queen's Lace Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Gold Lace S Golden Gate S Br. Princess Anne S Princess Anne S Pink Deluxe	Mar. 6	Mar. 6 - Mar. 13	Mar. 20	Mar. 20
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Feb. 27	Feb. 27 - Mar. 20	Mar. 13	Mar. 27
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	Mar. 6	Mar. 6 - Mar. 20	Mar. 20	Mar. 27
	Bridesmaid	Mar. 13	Mar. 13 - Mar. 20	Mar. 27	Mar. 27
	Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Mar. 13	Mar. 13 - Mar. 27	Mar. 27	Apr. 3
	Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Mar. 20	Mar. 20 - Apr. 3	Apr. 3	Apr. 10

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom May 29 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	Bonnaffon Deluxe Charm Blue Ridge	Feb. 27	Feb. 27 - Mar. 13	Mar. 13	Mar. 13
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Feb. 27	Feb. 27 - Mar. 20	Mar. 13	Mar. 20
	S Chalk Cliff Whiterion Jackstraw Scepter Red Star Red Humdinger Criterion Personality Humdinger Caress	Mar. 6	Mar. 6 - Mar. 20	Mar. 20	Mar. 20
	S Ind. Varieties Snow Crystal Queen's Lace Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Gold Lace S Golden Gate S Br. Princess Anne S Princess Anne S Pink Deluxe	Mar. 13	Mar. 13 - Mar. 20	Mar. 27	Mar. 20
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Mar. 6	Mar. 6 - Mar. 27	Mar. 20	Mar. 27
	S Monty Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	Mar. 13	Mar. 13 - Mar. 27	Mar. 27	Mar. 27
	Bridesmaid	Mar. 20	Mar. 20 - Mar. 27	Apr. 3	Mar. 27
	Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Mar. 20	Mar. 20 - Apr. 3	Apr. 3	Apr. 3
	Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Mar. 27	Mar. 27 - Apr. 10	Apr. 10	Apr. 10

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	Bonnaffon Deluxe	Mar. 6	Mar. 6 - Mar. 20	Mar. 20	Mar. 20
Bloom June 5 1961	S Oregon Yellow Delaware Delaware Mermaid	Mar. 6	Mar. 6 - Mar. 27	Mar. 20	Mar. 27
	Chalk Cliff Whiterion Jackstraw Scepter S Red Star Criterion Caress Personality Humdinger	Mar. 13	Mar. 13 - Mar. 27	Mar. 27	Mar. 27
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Mar. 13	Mar. 13 - Apr. 3	Mar. 27	Apr. 3
	S Ind. Varieties S Snow Crystal S Queen's Lace S Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Gold Lace S Golden Gate S Br. Princess Anne S Princess Anne	Mar. 20	Mar. 20 - Mar. 27	Apr. 3	Mar. 27
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	Mar. 20	Mar. 20 - Apr. 3	Apr. 3	Apr. 3
	Bridesmaid	Mar. 27	Mar. 27 - Apr. 3	Apr. 10	Apr. 3
	Bonnaffon Deluxe	Mar. 13	Mar. 13 - Mar. 27	Mar. 27	Mar. 27
	S Oregon Yellow Delaware Delaware Mermaid	Mar. 13	Mar. 13 - Apr. 3	Mar. 27	Apr. 3
Bloom June 12 1961	S Chalk Cliff Whiterion Jackstraw Scepter S Red Star Criterion Caress Personality Humdinger	Mar. 20	Mar. 20 - Apr. 3	Apr. 3	Apr. 3
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Mar. 27	Mar. 27 - Apr. 10	Apr. 10	Apr. 10
	S Ind. Varieties S Snow Crystal S Queen's Lace S Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Gold Lace S Golden Gate S Br. Princess Anne S Princess Anne	Mar. 27	Mar. 27 - Apr. 3	Apr. 10	Apr. 3
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	Apr. 3	Apr. 3 - Apr. 10	Apr. 17	Apr. 10
	Bridesmaid	Apr. 10	No	Apr. 24	Apr. 10

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom June 19 1961	Bonnaffon Deluxe	Mar. 27	Mar. 27 - Apr. 3	Apr. 10	Apr. 3
	S Oregon Yellow Delaware Delaware Mermaid	Mar. 27	Mar. 27 - Apr. 10	Apr. 10	Apr. 10
	Whiterion Jackstraw Luminary Scepter S Red Star Criterion Caress Personality	Apr. 3	Apr. 3 - Apr. 10	Apr. 17	Apr. 10
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Apr. 3	Apr. 3 - Apr. 17	Apr. 17	Apr. 17
	S Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	Apr. 10	No	Apr. 24	Apr. 10
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	Apr. 10	Apr. 10 - Apr. 17	Apr. 24	Apr. 17
	Bridesmaid	Apr. 17	No	May 1	Apr. 17
	Bonnaffon Deluxe	Apr. 3	Apr. 3 - Apr. 10	Apr. 17	Apr. 10
Bloom June 26 1961	S Oregon Yellow Delaware Delaware Mermaid	Apr. 3	Apr. 3 - Apr. 17	Apr. 17	Apr. 17
	S Whiterion Jackstraw Luminary Scepter S Red Star Criterion Caress Personality	Apr. 10	Apr. 10 - Apr. 17	Apr. 24	Apr. 17
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Apr. 10	Apr. 10 - Apr. 24	Apr. 24	Apr. 24
	S Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	Apr. 17	No	May 1	Apr. 17
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	Apr. 17	Apr. 17 - Apr. 24	May 1	Apr. 24
	Bridesmaid	Apr. 24	No	May 8	Apr. 24
	Bonnaffon Deluxe	Apr. 3	Apr. 3 - Apr. 10	Apr. 17	Apr. 10
	S Oregon Yellow Delaware Delaware Mermaid	Apr. 3	Apr. 3 - Apr. 17	Apr. 17	Apr. 17

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	Bonnaffon Deluxe	Apr. 10	Apr. 10 - Apr. 17	Apr. 24	Apr. 17
Bloom July 3 1961	S Oregon Yellow Delaware Delaware Mermaid	Apr. 10	Apr. 10 - Apr. 24	Apr. 24	Apr. 24
	S Whiterion Jackstraw Luminary Scepter Red Star Criterion Caress	Apr. 17	Apr. 17 - Apr. 24	May 1	Apr. 24
	S Wilson's White S Malou S Dark Wilson's Yellow	Apr. 17	Apr. 17 - May 1	May 1	May 1
	Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	Apr. 24	No	May 8	Apr. 24
	Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	Apr. 24	Apr. 24 - May 1	May 8	May 1
	Bridesmaid	May 1	No	May 15	May 1
	Bonnaffon Deluxe	Apr. 17	Apr. 17 - Apr. 24	May 1	Apr. 24
Bloom July 10 1961	S Oregon Yellow Delaware Delaware Mermaid	Apr. 17	Apr. 17 - May 1	May 1	May 1
	S Whiterion Jackstraw Luminary Scepter Red Star Criterion Caress	Apr. 24	Apr. 24 - May 1	May 8	May 1
	S Wilson's White S Malou S Dark Wilson's Yellow	Apr. 24	Apr. 24 - May 8	May 8	May 8
	Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	May 1	No	May 15	May 1
	Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	May 1	May 1 - May 8	May 15	May 8
	Bridesmaid	May 8	No	May 22	May 8
	Bonnaffon Deluxe	Apr. 17	Apr. 17 - Apr. 24	May 1	Apr. 24

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	Bonnaffon Deluxe	Apr. 24	Apr. 24 - May 1	May 8	May 1
Bloom July 17 1961	S Oregon Yellow Delaware Delaware Mermaid	Apr. 24	Apr. 24 - May 8	May 8	May 8
	Whiterion Jackstraw Luminary Scepter S Red Star Criterion Caress	May 1	May 1 - May 8	May 15	May 8
	S Wilson's White S Malou S Dark Wilson's Yellow	May 1	May 1 - May 15	May 15	May 15
	Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	May 8	No	May 22	May 8
	Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	May 8	May 8 - May 15	May 22	May 15
	Bridesmaid	May 15	No	May 29	May 15
	Bonnaffon Deluxe	May 1	May 1 - May 8	May 15	May 8
	S Oregon Yellow Delaware Delaware Mermaid	May 1	May 1 - May 15	May 15	May 15
Bloom July 24 1961	Whiterion Jackstraw Luminary Scepter S Red Star Criterion Caress	May 8	May 8 - May 15	May 22	May 15
	S Wilson's White S Malou S Dark Wilson's Yellow	May 8	May 8 - May 22	May 22	May 22
	Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	May 15	No	May 29	May 15
	Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	May 15	May 15 - May 22	May 29	May 22
	Bridesmaid	May 22	No	June 5	May 22
	Bonnaffon Deluxe	May 1	May 1 - May 8	May 15	May 8
	S Oregon Yellow Delaware Delaware Mermaid	May 1	May 1 - May 15	May 15	May 15
	Whiterion Jackstraw Luminary Scepter S Red Star Criterion Caress	May 8	May 8 - May 15	May 22	May 15

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	PINCH	SHADE
	Bonnaffon Deluxe	May 8	May 22	May 15
Bloom July 31 1961	S Oregon Yellow Delaware Delaware Mermaid	May 8	May 22	May 22
	Whiterion Jackstraw Luminary Scepter S Red Star Criterion Caress	May 15	May 29	May 22
	S Wilson's White S Malou S Dark Wilson's Yellow	May 15	May 29	May 29
	Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	May 22	June 5	May 22
	Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	May 22	June 5	May 29
	Bridesmaid	May 29	June 12	May 29
	Bonnaffon Deluxe	May 15	May 29	May 22
	S Oregon Yellow Delaware Delaware Mermaid	May 15	May 29	May 29
Bloom Aug. 7 1961	Whiterion Jackstraw Luminary Scepter S Red Star Criterion Caress	May 22	June 5	May 29
	S Wilson's White S Malou S Dark Wilson's Yellow	May 22	June 5	June 5
	Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	May 29	June 12	May 29
	Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	May 29	June 12	June 5
	Bridesmaid	June 5	June 19	June 5

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	PINCH	SHADE
Bloom Aug. 14 1961	Bonnaffon Deluxe	May 22	June 5	May 29
	S Oregon Yellow Delaware Delaware Mermaid	May 22	June 5	June 5
	Whiterion Jackstraw Luminary Scepter Red Star Criterion Caress	May 29	June 12	June 5
	S Wilson's White S Malou S Dark Wilson's Yellow	May 29	June 12	June 12
	Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	June 5	June 19	June 5
	Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	June 5	June 19	June 12
	Bridesmaid	June 12	June 26	June 12
Bloom Aug. 21 1961	Bonnaffon Deluxe	May 29	June 12	June 5
	S Oregon Yellow Delaware Delaware Mermaid	May 29	June 12	June 12
	Whiterion Jackstraw Luminary Scepter Red Star Criterion Caress	June 5	June 19	June 12
	S Wilson's White S Malou S Dark Wilson's Yellow	June 5	June 19	June 19
	Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	June 12	June 26	June 12
	Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	June 12	June 26	June 19
	Bridesmaid	June 19	July 3	June 19

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	PINCH	SHADE
	Bonnaffon Deluxe	June 5	June 19	June 12
Bloom Aug. 28 1961	S Oregon Yellow Delaware Delaware Mermaid	June 5	June 19	June 19
	S Whiterion Jackstraw Luminary Scepter Red Star Criterion Caress	June 12	June 26	June 19
	S Wilson's White S Malou S Dark Wilson's Yellow	June 12	June 26	June 26
	S Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	June 19	July 3	June 19
	S Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	June 19	July 3	June 26
	Bridesmaid	June 26	July 10	June 26
	Bonnaffon Deluxe	June 12	June 26	June 19
	S Oregon Yellow Delaware Delaware Mermaid	June 12	June 26	June 26
Bloom Sept. 4 1961	S Whiterion Jackstraw Luminary Scepter Red Star Criterion Caress	June 19	July 3	June 26
	S Wilson's White S Malou S Dark Wilson's Yellow	June 19	July 3	July 3
	S Snow Crystal Queen's Lace Golden Crystal Gold Lace S Yellow Deluxe	June 26	July 10	June 26
	S Quicksilver Snowclad Luna Sundial Dark Ribbon S Perle Angevine	June 26	July 10	July 3
	Bridesmaid	July 3	July 17	July 3
	Bonnaffon Deluxe	June 12	June 26	June 19
	S Oregon Yellow Delaware Delaware Mermaid	June 12	June 26	June 26

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	PINCH	SHADE
Bloom Sept. 11 1961	Bonaffon Deluxe Achievement	June 19	July 3	June 26
	S Splurge Harmony	June 26	July 10	June 26
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	June 19	July 3	July 3
	S Whiterion Luminary Jackstraw Scepter Red Star Criterion Caress Personality Humdinger	June 26	July 10	July 3
	S Wilson's White S Malou S Dark Wilson's Yellow	June 26	July 10	July 10
	S Starburst Snow Crystal Queen's Lace Golden Crystal Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Princess Anne	July 3	July 17	July 3
	S Quicksilver Snowclad Luna Sundial S Perle Angevine Dark Ribbon	July 3	July 17	July 10
	Royal Bronze Bridesmaid	July 10	July 24	July 10
	Bonaffon Deluxe Achievement	June 26	July 10	July 3
	S Splurge Harmony	July 3	July 17	July 17
Bloom Sept. 18 1961	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	June 26	July 10	July 10
	S Whiterion Luminary Jackstraw Scepter Red Star Criterion Caress Personality Humdinger	July 3	July 17	July 10
	S Wilson's White S Malou S Dark Wilson's Yellow	July 3	July 17	July 17
	S Starburst Snow Crystal Queen's Lace Golden Crystal Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Princess Anne	July 10	July 24	July 10
	S Quicksilver Snowclad Luna Sundial S Perle Angevine Dark Ribbon	July 10	July 24	July 17
	Royal Bronze Bridesmaid	July 17	July 31	July 17

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	PINCH	SHADE
Bloom Sept. 25 1961	Bonaffon Deluxe Achievement	July 3	July 17	July 10
	S Splurge S Harmony	July 10	July 24	July 10
	S Oregon S Yellow Delaware S Delaware S Fujii Delaware S Mermaid	July 3	July 17	July 17
	S Whiterion S Luminary S Jackstraw S Scepter S Red Star S Criterion S Caress S Personality S Humdinger	July 10	July 24	July 17
	S Wilson's White S Malou S Dark Wilson's Yellow	July 10	July 24	July 24
	S Starburst S Snow Crystal S Queen's Lace S Golden Crystal S Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Princess Anne	July 17	July 31	July 17
	S Quicksilver S Snowclad S Luna S Sundial S Perle Angevine S Dark Ribbon	July 17	July 31	July 24
	Royal Bronze Bridesmaid	July 24	Aug. 7	July 24
	Bonaffon Deluxe Achievement	July 10	July 24	July 17
	S Splurge S Harmony	July 17	July 31	July 17
Bloom Oct. 2 1961	S Oregon S Yellow Delaware S Delaware S Fujii Delaware S Mermaid	July 10	July 24	July 24
	S Whiterion S Luminary S Jackstraw S Scepter S Red Star S Criterion S Caress S Personality S Humdinger	July 17	July 31	July 24
	S Wilson's White S Malou S Dark Wilson's Yellow	July 17	July 31	July 31
	S Starburst S Snow Crystal S Queen's Lace S Golden Crystal S Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Princess Anne	July 24	Aug. 7	July 24
	S Quicksilver S Snowclad S Luna S Sundial S Perle Angevine S Dark Ribbon	July 24	Aug. 7	July 31
	Royal Bronze Bridesmaid	July 31	Aug. 14	July 31

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Oct. 9 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement S Bonnaffon Deluxe S Clipper S Charm	July 17	No	July 31	July 24
	S Oregon S Yellow Delaware S Delaware S Fujii Delaware S Mermaid	July 17	No	July 31	July 31
	S Splurge S Harmony S Valentine S Vedova S Venoya S Heather S Blue Ridge	July 24	No	Aug. 7	July 24
	S Whiterion S Chalk Cliff S Luminary S Scepter S Red Star S Criterion S Personality S Humdinger S Caress	July 24	No	Aug. 7	July 31
	S Wilson's White S Poitevine Supreme S Malou S Dark Wilson's Yellow	July 24	July 31 - Aug. 7	Aug. 7	Aug. 7
	S Ice Follies S White Deluxe S Starburst S Little America S Queen's Lace S Snow Crystal S Ind. Varieties S Gold Lace S Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Yellow Deluxe S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	July 31	No	Aug. 14	July 31
	S Monty S Luna S Quicksilver S Snowclad S Sundial S Rolute S Dark Ribbon S Perle Angevine	July 31	July 31 - Aug. 7	Aug. 14	Aug. 7
	S Royal Bronze S Bridesmaid	Aug. 7	No	Aug. 21	Aug. 7

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Oct. 16 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement Bonnaffon Deluxe Clipper Charm	July 24	No	Aug. 7	July 31
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	July 24	July 31 - Aug. 7	Aug. 7	Aug. 7
	S Splurge S Harmony S Valentine Vedova Venoya Heather Blue Ridge	July 31	No	Aug. 14	July 31
	S Whiterion Chalk Cliff Luminary Scepter Red Star Criterion Personality Humdinger Caress	July 31	July 31 - Aug. 7	Aug. 14	Aug. 7
	S Wilson's White S Poitevine Supreme S Malou S Dark Wilson's Yellow	July 24	July 24 - Aug. 14	Aug. 7	Aug. 14
	S Ice Follies White Deluxe Starburst Little America Queen's Lace Snow Crystal S Ind. Varieties Gold Lace Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Yellow Deluxe S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Aug. 7	No	Aug. 21	Aug. 7
	S Monty Luna Quicksilver Snowclad Sundial Resolute Dark Ribbon S Perle Angevine	July 31	July 31 - Aug. 14	Aug. 14	Aug. 14
	Royal Bronze Bridesmaid	Aug. 7	Aug. 7 - Aug. 14	Aug. 24	Aug. 14

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Oct. 23 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement S Bonnaffon Deluxe S Clipper S Charm	July 31	No	Aug. 14	Aug. 7
	S Oregon S Yellow Delaware S Delaware S Fujii Delaware S Mermaid	July 24	July 24 - Aug. 14	Aug. 7	Aug. 14
	S Splurge S Harmony S Valentine S Vedova S Venoya S Heather S Blue Ridge	Aug. 7	No	Aug. 21	Aug. 7
	S Whiterion S Chalk Cliff S Luminary S Scepter S Red Star S Criterion S Personality S Humdinger S Caress	July 31	July 31 - Aug. 14	Aug. 14	Aug. 14
	S Wilson's White S Poitevine Supreme S Malou S Dark Wilson's Yellow	July 31	July 31 - Aug. 21	Aug. 14	Aug. 21
	S Ice Follies S White Deluxe S Starburst S Little America S Queen's Lace S Snow Crystal S Ind. Varieties S Gold Lace S Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Yellow Deluxe S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Aug. 7	Aug. 7 - Aug. 14	Aug. 21	Aug. 14
	S Monty S Luna S Quicksilver S Snowclad S Sundial S Resolute S Dark Ribbon S Perle Angevine	Aug. 7	Aug. 7 - Aug. 21	Aug. 21	Aug. 21
	S Royal Bronze S Bridesmaid	Aug. 14	Aug. 14 - Aug. 21	Aug. 28	Aug. 21

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Oct. 30 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement Bonnaffon Deluxe Clipper Charm	July 31	July 31 - Aug. 14	Aug. 14	Aug. 14
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	July 31	July 31 - Aug. 21	Aug. 14	Aug. 21
	S Splurge S Harmony S Valentine Vedova Venoya Heather Blue Ridge	Aug. 7	Aug. 7 - Aug. 14	Aug. 21	Aug. 14
	S Whiterion Chalk Cliff Luminary Scepter S Red Star Criterion Personality Humdinger Caress	Aug. 7	Aug. 7 - Aug. 21	Aug. 21	Aug. 21
	S Wilson's White S Poitevine Supreme S Malou S Dark Wilson's Yellow	Aug. 7	Aug. 7 - Aug. 28	Aug. 21	Aug. 28
	S Ice Follies S White Deluxe Starburst Little America Queen's Lace Snow Crystal S Ind. Varieties Gold Lace Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Yellow Deluxe S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Aug. 14	Aug. 14 - Aug. 21	Aug. 28	Aug. 21
	Monty Luna Quicksilver Snowclad Sundial Resolute Dark Ribbon S Perle Angevine	Aug. 14	Aug. 14 - Aug. 28	Aug. 28	Aug. 28
	Royal Bronze Bridesmaid	Aug. 21	Aug. 21 - Aug. 28	Sept. 4	Aug. 28

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Nov. 6 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	Achievement Bonnaffon Deluxe S Clipper Charm	Aug. 7	Aug. 7 - Aug. 21	Aug. 21	Aug. 21
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Aug. 7	Aug. 7 - Aug. 28	Aug. 21	Aug. 28
	Splurge S Harmony S Valentine Vedova Venoya Heather Blue Ridge	Aug. 14	Aug. 14 - Aug. 21	Aug. 28	Aug. 21
	Chalk Cliff Scepter S Red Star Criterion Personality Caress Humdinger	Aug. 14	Aug. 14 - Aug. 28	Aug. 28	Aug. 28
	Ice Follies S White Deluxe Starburst Little America Queen's Lace Snow Crystal S Ind. Varieties Gold Lace Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Aug. 21	Aug. 21 - Aug. 28	Sept. 4	Aug. 28
	Luna Dark Ribbon S Perle Angevine Queen of Pinks	Aug. 21	Aug. 21 - Sept. 4	Sept. 4	No
	Royal Bronze Bridesmaid	Aug. 28	Aug. 28 - Sept. 4	Sept. 11	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Nov. 13 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement Bonnaffon Deluxe Clipper Charm	Aug. 14	Aug. 14 - Aug. 28	Aug. 28	Aug. 28
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Aug. 14	Aug. 14 - Sept. 4	Aug. 28	Sept. 4
	S Splurge S Harmony S Valentine Vedova Venoya Heather Blue Ridge	Aug. 21	Aug. 21 - Aug. 28	Sept. 4	Aug. 28
	S Chalk Cliff Scepter S Red Star Criterion Personality Caress Humdinger	Aug. 21	Aug. 21 - Sept. 4	Sept. 4	Sept. 4
	S Ice Follies S White Deluxe Starburst Little America Queen's Lace Snow Crystal S Ind. Varieties Gold Lace Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Aug. 28	Aug. 28 - Sept. 4	Sept. 21	Sept. 4
	S Luna Dark Ribbon S Perle Angevine Queen of Pinks	Aug. 28	Aug. 28 - Sept. 11	Sept. 11	No
	Royal Bronze Bridesmaid	Sept. 4	Sept. 4 - Sept. 11	Sept. 18	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Nov. 20 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement S Bonnaffon Deluxe S Clipper S Charm	Aug. 21	Aug. 21 - Sept. 4	Sept. 4	Sept. 4
	S Oregon S Yellow Delaware S Delaware S Fujii Delaware S Mermaid	Aug. 21	Aug. 21 - Sept. 11	Sept. 4	No
	S Splurge S Harmony S Valentine S Vedova S Venoya S Heather S Blue Ridge	Aug. 28	Aug. 28 - Sept. 4	Sept. 11	Sept. 4
	S Chalk Cliff S Scepter S Red Star S Criterion S Personality S Caress S Humdinger	Aug. 28	Aug. 28 - Sept. 11	Sept. 11	No
	S Ice Follies S White Deluxe S Starburst S Little America S Queen's Lace S Snow Crystal S Ind. Varieties S Gold Lace S Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Sept. 4	Sept. 4 - Sept. 11	Sept. 18	No
	S Luna S Dark Ribbon S Perle Angevine S Queen of Pinks	Sept. 4	Sept. 4 - Sept. 18	Sept. 18	No
	S Royal Bronze S Bridesmaid	Sept. 11	Sept. 11 - Sept. 21	Sept. 25	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Nov. 27 1961	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement Bonnaffon Deluxe Clipper Charm	Aug. 28	Aug. 28 - Sept. 11	Sept. 11	Sept. 11
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Aug. 28	Aug. 28 - Sept. 18	Sept. 11	No
	S Splurge S Harmony S Valentine Vedova Venoya Heather Blue Ridge	Sept. 4	Sept. 4 - Sept. 11	Sept. 18	Sept. 11
	S Chalk Cliff Scepter S Red Star Criterion Personality Caress Humdinger	Sept. 4	Sept. 4 - Sept. 18	Sept. 18	No
	S Ice Follies S White Deluxe Starburst Little America Queen's Lace Snow Crystal S Ind. Varieties Gold Lace Golden Crystal S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Sept. 11	Sept. 11 - Sept. 18	Sept. 25	No
	S Luna Dark Ribbon S Perle Angevine Queen of Pinks	Sept. 11	Sept. 11 - Sept. 25	Sept. 25	No
	Royal Bronze Bridesmaid	Sept. 18	Sept. 18 - Sept. 25	Oct. 2	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates

YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom Dec. 4 1961	S Achievement Bonaffon Deluxe Clipper Charm	Sept. 4	Sept. 4 - Sept. 18	Sept. 18	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Sept. 4	Sept. 4 - Sept. 25	Sept. 18	No
	S Splurge S Harmony S Valentine Venoya Heather Blue Ridge	Sept. 11	Sept. 11 - Sept. 18	Sept. 25	No
	S Chalk Cliff Scepter Red Star Criterion Personality Caress Humdinger	Sept. 11	Sept. 11 - Sept. 25	Sept. 25	No
	S Ice Follies S White Deluxe Starburst Little America Queen's Lace Golden Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Sept. 18	Sept. 18 - Sept. 25	Oct. 2	No
	Luna Dark Ribbon Queen of Pinks Bridesmaid	Sept. 18	Sept. 18 - Oct. 2	Oct. 2	No
	S Achievement Bonaffon Deluxe Clipper Charm	Sept. 11	Sept. 11 - Sept. 25	Sept. 25	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Sept. 11	Sept. 11 - Oct. 2	Sept. 25	No
Bloom Dec. 11 1961	S Splurge S Harmony S Valentine Venoya Heather Blue Ridge	Sept. 18	Sept. 18 - Sept. 25	Oct. 2	No
	S Chalk Cliff Scepter Red Star Criterion Personality Caress Humdinger	Sept. 18	Sept. 18 - Oct. 2	Oct. 2	No
	S Ice Follies S White Deluxe Starburst Little America Queen's Lace Golden Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Sept. 25	Sept. 25 - Oct. 2	Oct. 9	No
	Luna Dark Ribbon Queen of Pinks Bridesmaid	Sept. 25	Sept. 25 - Oct. 9	Oct. 9	No
	S Achievement Bonaffon Deluxe Clipper Charm	Sept. 11	Sept. 11 - Sept. 25	Sept. 25	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Sept. 11	Sept. 11 - Oct. 2	Sept. 25	No
	S Splurge S Harmony S Valentine Venoya Heather Blue Ridge	Sept. 18	Sept. 18 - Sept. 25	Oct. 2	No
	S Chalk Cliff Scepter Red Star Criterion Personality Caress Humdinger	Sept. 18	Sept. 18 - Oct. 2	Oct. 2	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates

YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom Dec. 18 1961	S Achievement Bonnaffon Deluxe Clipper Charm	Sept. 18	Sept. 18 - Oct. 2	Oct. 2	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Sept. 18	Sept. 18 - Oct. 9	Oct. 2	No
	S Splurge S Harmony S Valentine Venoya Heather Blue Ridge	Sept. 25	Sept. 25 - Oct. 2	Oct. 9	No
	S Chalk Cliff Scepter Red Star Criterion Personality Caress Humdinger	Sept. 25	Sept. 25 - Oct. 9	Oct. 9	No
	S Ice Follies S White Deluxe Starburst Little America Queen's Lace Golden Crystal Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Oct. 2	Oct. 2 - Oct. 9	Oct. 16	No
	Luna Dark Ribbon Queen of Pinks Bridesmaid	Oct. 2	Oct. 2 - Oct. 16	Oct. 16	No
Bloom Dec. 25 1961	S Achievement Bonnaffon Deluxe Clipper Charm	Sept. 25	Sept. 25 - Oct. 9	Oct. 9	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Sept. 25	Sept. 25 - Oct. 16	Oct. 9	No
	S Splurge S Harmony S Valentine Venoya Heather Blue Ridge	Oct. 2	Oct. 2 - Oct. 9	Oct. 16	No
	S Chalk Cliff Scepter Red Star Criterion Personality Caress Humdinger	Oct. 2	Oct. 2 - Oct. 16	Oct. 16	No
	S Ice Follies S White Deluxe Starburst Little America Queen's Lace Golden Crystal Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Oct. 9	Oct. 9 - Oct. 16	Oct. 23	No
	Luna Dark Ribbon Queen of Pinks Bridesmaid	Oct. 2	Oct. 2 - Oct. 23	Oct. 23	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom Jan. 1 1962	S Achievement Bonnaffon Deluxe Clipper Charm	Oct. 2	Oct. 2 - Oct. 16	Oct. 16	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Oct. 2	Oct. 2 - Oct. 23	Oct. 16	No
	S Splurge S Harmony S Valentine Heather Blue Ridge	Oct. 9	Oct. 9 - Oct. 16	Oct. 23	No
	S Chalk Cliff Red Star Criterion Personality Caress	Oct. 2	Oct. 2 - Oct. 23	Oct. 23	No
	S Ice Follies White Deluxe Starburst Little America Queen's Lace Golden Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Oct. 9	Oct. 9 - Oct. 23	Oct. 30	No
	Luna Queen of Pinks Bridesmaid	Oct. 9	Oct. 9 - Oct. 30	Oct. 30	No
	S Achievement Bonnaffon Deluxe Clipper Charm	Oct. 2	Oct. 2 - Oct. 23	Oct. 23	No
Bloom Jan. 8 1962	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Oct. 2	Oct. 2 - Oct. 30	Oct. 23	No
	S Splurge S Harmony S Valentine Heather Blue Ridge	Oct. 9	Oct. 9 - Oct. 23	Oct. 30	No
	S Chalk Cliff Red Star Criterion Personality Caress	Oct. 9	Oct. 9 - Oct. 30	Oct. 30	No
	S Ice Follies White Deluxe Starburst Little America Queen's Lace Golden Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Oct. 16	Oct. 16 - Oct. 30	Nov. 6	No
	Luna Queen of Pinks Bridesmaid	Oct. 16	Oct. 16 - Nov. 6	Nov. 6	No
	S Achievement Bonnaffon Deluxe Clipper Charm	Oct. 2	Oct. 2 - Oct. 23	Oct. 23	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Oct. 2	Oct. 2 - Oct. 30	Oct. 23	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom Jan. 15 1962	S Achievement Bonnaffon Deluxe Clipper Charm	Oct. 9	Oct. 9 - Oct. 30	Oct. 30	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Oct. 9	Oct. 9 - Nov. 6	Oct. 30	No
	S Splurge S Harmony S Valentine Heather Blue Ridge	Oct. 16	Oct. 16 - Oct. 30	Nov. 6	No
	S Chalk Cliff Red Star Criterion Personality Caress	Oct. 16	Oct. 16 - Nov. 6	Nov. 6	No
	S Ice Follies White Deluxe Starburst Little America Queen's Lace Golden Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Oct. 23	Oct. 23 - Nov. 6	Nov. 13	No
	Luna Queen of Pinks Bridesmaid	Oct. 23	Oct. 23 - Nov. 13	Nov. 13	No
	S Achievement Bonnaffon Deluxe Clipper Charm	Oct. 16	Oct. 16 - Nov. 6	Nov. 6	No
Bloom Jan. 22 1962	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Oct. 16	Oct. 16 - Nov. 13	Nov. 6	No
	S Splurge S Harmony S Valentine Heather Blue Ridge	Oct. 23	Oct. 23 - Nov. 6	Nov. 13	No
	S Chalk Cliff Red Star Criterion Personality Caress	Oct. 23	Oct. 23 - Nov. 13	Nov. 13	No
	S Ice Follies White Deluxe Starburst Little America Queen's Lace Golden Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Oct. 30	Oct. 30 - Nov. 13	Nov. 20	No
	Luna Queen of Pinks Bridesmaid	Oct. 30	Oct. 30 - Nov. 20	Nov. 20	No
	S Achievement Bonnaffon Deluxe Clipper Charm	Oct. 16	Oct. 16 - Nov. 6	Nov. 6	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Oct. 16	Oct. 16 - Nov. 13	Nov. 6	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom Jan. 29 1962	S Achievement Bonnaffon Deluxe Clipper Charm	Oct. 23	Oct. 23 - Nov. 13	Nov. 13	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Oct. 23	Oct. 23 - Nov. 20	Nov. 13	No
	S Splurge S Harmony S Valentine S Heather S Blue Ridge	Oct. 30	Oct. 30 - Nov. 13	Nov. 20	No
	S Chalk Cliff S Red Star S Criterion S Personality S Caress	Oct. 30	Oct. 30 - Nov. 20	Nov. 20	No
	S Ice Follies S White Deluxe S Starburst S Little America S Queen's Lace S Golden Crystal S Snow Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Nov. 6	Nov. 6 - Nov. 20	Nov. 27	No
	Luna Queen of Pinks Bridesmaid	Nov. 6	Nov. 6 - Nov. 27	Nov. 27	No
	S Achievement S Bonnaffon Deluxe S Clipper S Charm	Oct. 30	Oct. 30 - Nov. 20	Nov. 20	No
Bloom Feb. 5 1962	S Oregon S Yellow Delaware S Delaware S Fujii Delaware S Mermaid	Oct. 30	Oct. 30 - Nov. 27	Nov. 20	No
	S Splurge S Harmony S Valentine S Heather S Blue Ridge	Nov. 6	Nov. 6 - Nov. 20	Nov. 27	No
	S Chalk Cliff S Red Star S Criterion S Personality S Caress	Nov. 6	Nov. 6 - Nov. 27	Nov. 27	No
	S Ice Follies S White Deluxe S Starburst S Snow Crystal S Little America S Queen's Lace S Golden Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Nov. 13	Nov. 13 - Nov. 27	Dec. 4	No
	Luna Queen of Pinks Bridesmaid	Nov. 13	Nov. 13 - Dec. 4	Dec. 4	No
	S Achievement S Bonnaffon Deluxe S Clipper S Charm	Oct. 30	Oct. 30 - Nov. 20	Nov. 20	No
	S Oregon S Yellow Delaware S Delaware S Fujii Delaware S Mermaid	Oct. 30	Oct. 30 - Nov. 27	Nov. 20	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom Feb. 12 1962	S Achievement Bonnaffon Deluxe Clipper Charm	Nov. 6	Nov. 6 - Nov. 27	Nov. 27	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Nov. 6	Nov. 6 - Dec. 4	Nov. 27	No
	S Splurge Harmony S Valentine Heather Blue Ridge	Nov. 13	Nov. 13 - Nov. 27	Dec. 4	No
	S Chalk Cliff Red Star Criterion Personality Caress	Nov. 13	Nov. 13 - Dec. 4	Dec. 4	No
	S Ice Follies White Deluxe Starburst Little America Queen's Lace Golden Crystal Snow Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Nov. 20	Nov. 20 - Dec. 4	Dec. 11	No
	Luna Queen of Pinks Bridesmaid	Nov. 20	Nov. 20 - Dec. 11	Dec. 11	No
	S Achievement Bonnaffon Deluxe Clipper Charm	Nov. 13	Nov. 13 - Dec. 4	Dec. 4	No
Bloom Feb. 19 1962	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Nov. 13	Nov. 13 - Dec. 11	Dec. 4	No
	S Splurge Harmony S Valentine Heather Blue Ridge	Nov. 20	Nov. 20 - Dec. 4	Dec. 11	No
	S Chalk Cliff Red Star Criterion Personality Caress	Nov. 20	Nov. 20 - Dec. 11	Dec. 11	No
	S Ice Follies White Deluxe Starburst Snow Crystal Little America Queen's Lace Golden Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Nov. 27	Nov. 27 - Dec. 11	Dec. 18	No
	Luna Queen of Pinks Bridesmaid	Nov. 27	Nov. 27 - Dec. 18	Dec. 18	No
	S Achievement Bonnaffon Deluxe Clipper Charm	Nov. 13	Nov. 13 - Dec. 4	Dec. 4	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Nov. 13	Nov. 13 - Dec. 11	Dec. 4	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom Feb. 26 1962	S Achievement S Bonnaffon Deluxe S Clipper S Charm	Nov. 20	Nov. 20 - Dec. 11	Dec. 11	No
	S Oregon S Yellow Delaware S Delaware S Fujii Delaware S Mermaid	Nov. 20	Nov. 20 - Dec. 18	Dec. 11	No
	S Splurge S Harmony S Valentine S Heather S Blue Ridge	Nov. 27	Nov. 27 - Dec. 11	Dec. 18	No
	S Chalk Cliff S Red Star S Criterion S Personality S Caress S Humdinger	Nov. 27	Nov. 27 - Dec. 18	Dec. 18	No
	S Ice Follies S White Deluxe S Starburst S Little America S Queen's Lace S Golden Crystal S Snow Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Dec. 4	Dec. 4 - Dec. 18	Dec. 25	No
	Luna Queen of Pinks Bridesmaid	Dec. 4	Dec. 4 - Dec. 25	Dec. 25	No
	S Achievement S Bonnaffon Deluxe S Clipper S Charm	Nov. 27	Nov. 27 - Dec. 18	Dec. 18	No
	S Oregon S Yellow Delaware S Delaware S Fujii Delaware S Mermaid	Nov. 27	Nov. 27 - Dec. 25	Dec. 18	No
Bloom Mar. 5 1962	S Splurge S Harmony S Valentine S Heather S Blue Ridge	Dec. 4	Dec. 4 - Dec. 18	Dec. 25	No
	S Chalk Cliff S Red Star S Criterion S Personality S Caress S Humdinger	Dec. 4	Dec. 4 - Dec. 25	Dec. 25	No
	S Ice Follies S White Deluxe S Starburst S Snow Crystal S Little America S Queen's Lace S Golden Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Dec. 11	Dec. 11 - Dec. 25	Jan. 1	No
	Luna Queen of Pinks Bridesmaid	Dec. 11	Dec. 11 - Jan. 1	Jan. 1	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom Mar. 12 1962	S Achievement Bonnaffon Deluxe Clipper Charm	Dec. 4	Dec. 4 - Dec. 25	Dec. 25	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Dec. 4	Dec. 4 - Jan. 1	Dec. 25	No
	S Splurge S Harmony S Valentine Heather Blue Ridge	Dec. 11	Dec. 11 - Dec. 25	Jan. 1	No
	S Chalk Cliff Red Star Criterion Personality Caress Humdinger	Dec. 11	Dec. 11 - Jan. 1	Jan. 1	No
	S Ice Follies White Deluxe Starburst Little America Queen's Lace Golden Crystal Snow Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Dec. 18	Dec. 18 - Jan. 1	Jan. 8	No
	Luna Queen of Pinks Bridesmaid	Dec. 18	Dec. 18 - Jan. 8	Jan. 8	No
Bloom Mar. 19 1962	S Achievement Bonnaffon Deluxe Clipper Charm	Dec. 11	Dec. 11 - Jan. 1	Jan. 1	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Dec. 11	Dec. 11 - Jan. 8	Jan. 1	No
	S Splurge S Harmony S Valentine Heather Blue Ridge	Dec. 18	Dec. 18 - Jan. 1	Jan. 8	No
	S Chalk Cliff Red Star Criterion Personality Caress Humdinger	Dec. 18	Dec. 18 - Jan. 8	Jan. 8	No
	S Ice Follies White Deluxe Starburst Snow Crystal Little America Queen's Lace Golden Crystal S Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Dec. 25	Dec. 25 - Jan. 8	Jan. 15	No
	Luna Queen of Pinks Bridesmaid	Dec. 25	Dec. 25 - Jan. 15	Jan. 15	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates

YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom Mar. 26 1962	S Achievement Bonnaffon Deluxe Clipper Charm	Dec. 18	Dec. 18 - Jan. 8	Jan. 8	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Dec. 18	Dec. 18 - Jan. 15	Jan. 8	No
	S Splurge Harmony Heather Blue Ridge	Dec. 25	Dec. 25 - Jan. 8	Jan. 15	No
	S Chalk Cliff Red Star Criterion Personality Caress Humdinger	Dec. 25	Dec. 25 - Jan. 15	Jan. 15	No
	S Ice Follies White Deluxe Starburst Little America Queen's Lace Golden Crystal Snow Crystal Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Jan. 1	Jan. 1 - Jan. 15	Jan. 22	No
	Monty Quicksilver Snowclad Luna Queen of Pinks Blue Ribbon Bridesmaid	Jan. 1	Jan. 1 - Jan. 22	Jan. 22	No
	S Achievement Bonnaffon Deluxe Clipper Charm	Dec. 25	Dec. 25 - Jan. 15	Jan. 15	No
Bloom Apr. 2 1962	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Dec. 25	Dec. 25 - Jan. 22	Jan. 15	No
	S Splurge Harmony Heather Blue Ridge	Jan. 1	Jan. 1 - Jan. 15	Jan. 22	No
	S Chalk Cliff Red Star Criterion Personality Caress Humdinger	Jan. 1	Jan. 1 - Jan. 22	Jan. 22	No
	S Ice Follies White Deluxe Starburst Little America Queen's Lace Golden Crystal Snow Crystal Yellow Deluxe S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Jan. 8	Jan. 8 - Jan. 22	Jan. 29	No
	Monty Quicksilver Snowclad Luna Queen of Pinks Blue Ribbon Bridesmaid	Jan. 8	Jan. 8 - Jan. 29	Jan. 29	No
	S Achievement Bonnaffon Deluxe Clipper Charm	Dec. 25	Dec. 25 - Jan. 15	Jan. 15	No
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Dec. 25	Dec. 25 - Jan. 22	Jan. 15	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Apr. 9 1962	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement Bonnaffon Deluxe Clipper Charm	Jan. 1	Jan. 1 - Jan. 22	Jan. 22	Mar. 12
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Jan. 1	Jan. 1 - Jan. 29	Jan. 22	Mar. 19
	S Splurge Harmony Heather Blue Ridge	Jan. 8	Jan. 8 - Jan. 22	Jan. 29	Mar. 2
	S Chalk Cliff Scepter Red Star Red Humdinger Criterion Personality Caress Humdinger	Jan. 8	Jan. 8 - Jan. 29	Jan. 29	Mar. 19
	S Granite State Wilson's White S Malou S Dark Wilson's Yellow	Jan. 8	Jan. 8 - Feb. 5	Jan. 29	No
	S Ind. Varieties Ice Follies Snow Crystal Queen's Lace Starburst Golden Crystal Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S White Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Jan. 15	Jan. 15 - Jan. 29	Feb. 5	Mar. 19
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon Queen of Pinks	Jan. 15	Jan. 15 - Feb. 5	Feb. 5	No
	Bridesmaid	Jan. 22	Jan. 22 - Feb. 5	Feb. 12	No
	Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Jan. 22	Jan. 22 - Feb. 12	Feb. 12	No
	Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Jan. 29	Jan. 29 - Feb. 19	Feb. 19	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Apr. 16 1962	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement S Bonnaffon Deluxe S Clipper S Charm	Jan. 8	Jan. 8 - Jan. 29	Jan. 29	Mar. 12
	S Oregon S Yellow Delaware S Delaware S Fujii Delaware S Mermaid	Jan. 8	Jan. 8 - Feb. 5	Jan. 29	Mar. 19
	S Splurge S Harmony S Heather S Blue Ridge	Jan. 15	Jan. 15 - Jan. 29	Feb. 5	Mar. 12
	S Chalk Cliff S Scepter S Red Star S Red Humdinger S Criterion S Personality S Caress S Humdinger	Jan. 15	Jan. 15 - Feb. 5	Feb. 5	Mar. 19
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Jan. 15	Jan. 15 - Feb. 12	Feb. 5	Mar. 26
	S Ind. Varieties S Ice Follies S Snow Crystal S Queen's Lace S Starburst S Golden Crystal S Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S White Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Jan. 22	Jan. 22 - Feb. 5	Feb. 12	Mar. 19
	S Monty S Quicksilver S Snowclad S Luna S Sundial S Dark Ribbon S Queen of Pinks	Jan. 22	Jan. 22 - Feb. 12	Feb. 12	Mar. 26
	Bridesmaid	Jan. 29	Jan. 29 - Feb. 12	Feb. 19	Mar. 26
	S Joan-Ette S Gloria S Gardenia S Peking S Blazing Gold S Cheyenne S Radiance S Caprice S Zest S Majestic S Royal-Ette	Feb. 5	Feb. 5 - Feb. 19	Feb. 19	No
	S Ostosa S Larry S Chris. Columbus S Jessamine Williams S Diamond S Yel. Chris. Columbus S Gay Blade S Astoria S Charles Nye S Yellow Spoon S Kings Ransom S Ethel Waters S Minnehaha S Mesabi S Lipstick S Remembrance S Red Mischief S Dolli-Ette S Toronto S Minnpink S Purple Waters S Spellbound S Cecelia S Ann Ladygo S Mischief S Joybringer S Raspberry Ice S Alert S No. 2 Fuchsia Fairy	Feb. 12	Feb. 12 - Feb. 26	Feb. 26	No

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom Apr. 23 1962	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement S Bonnaffon Deluxe S Clipper S Charm	Jan. 15	Jan. 15 - Feb. 5	Feb. 5	Mar. 12
	S Oregon S Yellow Delaware S Delaware S Fujii Delaware S Mermaid	Jan. 15	Jan. 15 - Feb. 12	Feb. 5	Mar. 19
	S Splurge S Harmony S Heather S Blue Ridge	Jan. 22	Jan. 22 - Feb. 5	Feb. 12	Mar. 2
	S Chalk Cliff S Scepter S Red Star S Red Humdinger S Criterion S Personality S Caress S Humdinger	Jan. 22	Jan. 22 - Feb. 12	Feb. 12	Mar. 19
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Jan. 29	Jan. 29 - Feb. 19	Feb. 12	Mar. 26
	S Ind. Varieties S Ice Follies S Snow Crystal S Queen's Lace S Starburst S Golden Crystal S Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S White Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Jan. 29	Jan. 29 - Feb. 12	Feb. 19	Mar. 19
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon Queen of Pinks	Feb. 5	Feb. 5 - Feb. 19	Feb. 19	Mar. 26
	Bridesmaid	Feb. 12	Feb. 12 - Feb. 19	Feb. 26	Mar. 26
	Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Feb. 12	Feb. 12 - Feb. 26	Feb. 26	Apr. 2
	Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Feb. 19	Feb. 19 - Mar. 5	Mar. 5	Apr. 9

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom Apr. 30 1962	S Achievement Bonnaffon Deluxe Clipper Charm	Jan. 22	Jan. 22 - Feb. 12	Feb. 12	Mar. 12
	S Oregon Yellow Delaware Delaware Fujii Delaware Mermaid	Jan. 22	Jan. 22 - Feb. 19	Feb. 12	Mar. 19
	S Splurge Harmony Heather Blue Ridge	Jan. 29	Jan. 29 - Feb. 12	Feb. 19	Mar. 12
	S Chalk Cliff Scepter Red Star Red Humdinger Criterion Personality Caress Humdinger	Feb. 5	Feb. 5 - Feb. 19	Feb. 19	Mar. 19
	S Granite State Wilson's White Malou S Dark Wilson's Yellow	Feb. 5	Feb. 5 - Feb. 26	Feb. 19	Mar. 26
	S Ind. Varieties Ice Follies Snow Crystal Queen's Lace Starburst Golden Crystal Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S White Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Feb. 12	Feb. 12 - Feb. 19	Feb. 26	Mar. 19
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon Queen of Pinks	Feb. 12	Feb. 12 - Feb. 26	Feb. 26	Mar. 26
	Bridesmaid	Feb. 19	Feb. 19 - Feb. 26	Mar. 5	Mar. 26
	Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Feb. 19	Feb. 19 - Mar. 5	Mar. 5	Apr. 2
	Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Feb. 26	Feb. 26 - Mar. 12	Mar. 12	Apr. 9

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom May 7 1962	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement Bonnaffon Deluxe Clipper Charm	Feb. 5	Feb. 5 - Feb. 19	Feb. 19	Mar. 12
	S Oregon Yellow Delaware Fujii Delaware Mermaid	Feb. 5	Feb. 5 - Feb. 26	Feb. 19	Mar. 19
	S Splurge Harmony Heather Blue Ridge	Feb. 12	Feb. 12 - Feb. 19	Feb. 26	Mar. 12
	S Chalk Cliff Scepter Red Star Red Humdinger Criterion Personality Caress Humdinger	Feb. 12	Feb. 12 - Feb. 26	Feb. 26	Mar. 19
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Feb. 12	Feb. 12 - Mar. 5	Feb. 26	Mar. 26
	S Ind. Varieties Ice Follies Snow Crystal Queen's Lace Starburst S White Deluxe S Golden Crystal S Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Feb. 19	Feb. 19 - Feb. 26	Mar. 5	Mar. 19
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon Queen of Pinks	Feb. 19	Feb. 19 - Mar. 5	Mar. 5	Mar. 26
	Bridesmaid	Feb. 26	Feb. 26 - Mar. 5	Mar. 12	Mar. 26
	Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Feb. 26	Feb. 26 - Mar. 12	Mar. 12	Apr. 2
	Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Mar. 5	Mar. 5 - Mar. 19	Mar. 19	Apr. 9

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

Bloom May 14 1962	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
	S Achievement S Bonnaffon Deluxe S Clipper S Charm	Feb. 12	Feb. 12 - Feb. 26	Feb. 26	Mar. 12
	S Oregon S Yellow Delaware S Fujii Delaware S Mermaid	Feb. 12	Feb. 12 - Mar. 5	Feb. 26	Mar. 19
	E Splurge S Harmony S Heather S Blue Ridge	Feb. 19	Feb. 19 - Feb. 26	Mar. 5	Mar. 12
	S Chalk Cliff S Scepter S Red Star S Red Humdinger S Criterion S Personality S Caress S Humdinger	Feb. 19	Feb. 19 - Mar. 5	Mar. 5	Mar. 19
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Feb. 19	Feb. 19 - Mar. 12	Mar. 5	Mar. 26
	S Ind. Varieties S Ice Follies S Snow Crystal S Queen's Lace S Starburst S White Deluxe S Golden Crystal S Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Feb. 26	Feb. 26 - Mar. 5	Mar. 12	Mar. 19
	Monty Quicksilver Snowclad Luna Sundial Dark Ribbon Queen of Pinks	Feb. 26	Feb. 26 - Mar. 12	Mar. 12	Mar. 26
	Bridesmaid	Mar. 5	Mar. 5 - Mar. 12	Mar. 19	Mar. 26
	Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Mar. 5	Mar. 5 - Mar. 19	Mar. 19	Apr. 2
	Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Mar. 12	Mar. 12 - Mar. 26	Mar. 26	Apr. 9

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

	VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
Bloom May 21 1962	S Achievement S Bonaffon Deluxe S Clipper S Charm	Feb. 19	Feb. 19 - Mar. 5	Mar. 5	Mar. 12
	S Oregon S Yellow Delaware S Fujii Delaware S Mermaid	Feb. 19	Feb. 19 - Mar. 12	Mar. 5	Mar. 19
	S Splurge S Harmony S Heather S Blue Ridge	Feb. 26	Feb. 26 - Mar. 5	Mar. 12	Mar. 12
	S Chalk Cliff S Scepter S Red Star S Red Humdinger S Criterion S Personality S Caress S Humdinger	Feb. 26	Feb. 26 - Mar. 12	Mar. 12	Mar. 19
	S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Feb. 26	Feb. 26 - Mar. 19	Mar. 12	Mar. 26
	S Ind. Varieties S Ice Follies S Snow Crystal S Queen's Lace S Starburst S White Deluxe S Golden Crystal S Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Mar. 5	Mar. 5 - Mar. 12	Mar. 19	Mar. 19
	S Monty S Quicksilver S Snowclad S Luna S Sundial S Dark Ribbon S Queen of Pinks	Mar. 5	Mar. 5 - Mar. 19	Mar. 19	Mar. 26
	S Bridesmaid	Mar. 12	Mar. 12 - Mar. 19	Mar. 26	Mar. 26
	S Joan-Ette S Gloria S Gardenia S Peking S Blazing Gold S Cheyenne S Radiance S Caprice S Zest S Majestic S Royal-Ette	Mar. 12	Mar. 12 - Mar. 26	Mar. 26	Apr. 2
	S Ostosa S Larry S Chris. Columbus S Jessamine Williams S Diamond S Yel. Chris. Columbus S Gay Blade S Astoria S Charles Nye S Yellow Spoon S Kings Ransom S Ethel Waters S Minnehaha S Mesabi S Lipstick S Remembrance S Red Mischief S Dolli-Ette S Toronto S Minnpink S Purple Waters S Spellbound S Cecelia S Ann Ladygo S Mischief S Joybringer S Raspberry Ice S Alert S No. 2 Fuchsia Fairy	Mar. 19	Mar. 19 - Apr. 2	Apr. 2	Apr. 9

S — For Single Stem Pots — Plant and Shade on Pinch Dates



YEAR-ROUND POT PLANT SCHEDULE

**Bloom
May 28
1962**

VARIETIES	PLANT 5 OR 6 CUTTINGS IN 6" POT	LIGHTING PERIOD	PINCH	SHADE
S Achievement S Bonnaffon Deluxe S Clipper S Charm	Feb. 26	Feb. 26 - Mar. 12	Mar. 12	Mar. 12
S Oregon S Yellow Delaware S Fujii Delaware S Mermaid	Feb. 26	Feb. 26 - Mar. 19	Mar. 12	Mar. 19
S Splurge S Harmony S Heather S Blue Ridge	Mar. 5	Mar. 5 - Mar. 12	Mar. 19	Mar. 12
S Chalk Cliff S Scepter S Red Star S Red Humdinger S Criterion S Personality S Caress S Humdinger	Mar. 5	Mar. 5 - Mar. 19	Mar. 19	Mar. 19
S Granite State S Wilson's White S Malou S Dark Wilson's Yellow	Mar. 5	Mar. 5 - Mar. 26	Mar. 19	Mar. 26
S Ind. Varieties S Ice Follies S Snow Crystal S Queen's Lace- S Starburst S White Deluxe S Golden Crystal S Gold Lace S Golden Yel. Princess Anne S Cream Yel. Princess Anne S Yellow Deluxe S Golden Gate S Bronze Princess Anne S Apricot Princess Anne S Princess Anne S Pink Deluxe	Mar. 12	Mar. 12 - Mar. 19	Mar. 26	Mar. 19
Monty Quicksilver Snowclad Luna Sundial Dark Ribbon Queen of Pinks	Mar. 12	Mar. 12 - Mar. 26	Mar. 26	Mar. 26
Bridesmaid	Mar. 19	Mar. 19 - Mar. 26	Apr. 2	Mar. 26
Joan-Ette Gloria Gardenia Peking Blazing Gold Cheyenne Radiance Caprice Zest Majestic Royal-Ette	Mar. 19	Mar. 19 - Apr. 2	Apr. 2	Apr. 2
Ostosa Larry Chris. Columbus Jessamine Williams Diamond Yel. Chris. Columbus Gay Blade Astoria Charles Nye Yellow Spoon Kings Ransom Ethel Waters Minnehaha Mesabi Lipstick Remembrance Red Mischief Dolli-Ette Toronto Minnpink Purple Waters Spellbound Cecelia Ann Ladygo Mischief Joybringer Raspberry Ice Alert No. 2 Fuchsia Fairy	Mar. 26	Mar. 26 - Apr. 9	Apr. 9	Apr. 9

S — For Single Stem Pots — Plant and Shade on Pinch Dates



NEW POT PLANT VARIETIES

WHITE

YGA Diamond

Oct. 5 (7 week)—Intermediate white pompon. Its very dwarf, compact and spreading habit is ideally suited for spring pots. A little shorter and much stronger than Chris. Columbus, Larry or Ostosa. It provides more durable and longer lasting flowers. Unquestionably the top white for spring pots with no light-no shade or short treatment. Ideal border variety for the garden. Price.....Y-8A

YGA White Deluxe

Nov. 10 (10 week)—Clear white sport from Pink Deluxe. Useful the year 'round with tall treatment. Hold 60° minimum for best color clarity. Will pink if finished cold. Large and showy with same good spread and breaking action as parent. Available June 5, 1961. Price.....Y-8A

North and East—Year round.

South—November through April.

West—October through May.

YGA Starburst

Nov. 10 (10 week)—Pure white feathered decorative. Prolific and responsively uniform. Fine breaking action with no uneven stolen growths. Frequently has a nice green overcast that provides a fresh, clean appearance. Recommended the year 'round with tall treatment. Normally more uniform than Snow Crystal. Treat and use in same manner as Snow Crystal. Available June 5, 1961. Price.....Y-8A

North and East—Year round.

South—November through April.

West—Year round.

YELLOW

Dark Wilson's Yellow

Nov. 1 (9 week)—A valuable color intensification that is being used to replace all original stock of Wilson's Yellow. Price.....Y-7B

YGA Jackstraw

Nov. 5 (10 week)—Large deep yellow feathered decorative. Originally bred to provide a yellow companion for Snow Crystal. Jackstraw develops a larger flower with improved form. Compared with Snow Crystal, it is of shorter habit best suited to medium treatment. Displays high and low temperature tolerance with fine, uniform response. Breaks are strong and numerous with foliage carried well to the flowers. Available February 6, 1961. Price.....Y-8A

North and East—Year round.

South—Year round.

West—Year round.

YGA Golden Crystal

Nov. 5 (10 week)—Deep golden yellow sport from Snow Crystal. Color is much darker than Yellow Crystal. Both disbud and spray pots are recommended with tall treatment the year round. Price.....Y-8A

Golden Gate

Nov. 10 (10 week)—Large decorative standard. Beautiful golden bronze sport from Princess Anne. Given tall treatment it is always uniformly responsive in single stem or pinched pot programs. Price.....Y-7B

North and East—Mid-September through mid-June.

South—November through April.

West—Year round.

Golden Princess Anne

Nov. 10 (10 week)—Large decorative standard. Golden Yellow. Its fine pot growth habit, good spread and uniform response, due to low temperature tolerance, is rapidly being recognized. Quite tall in summer. With one extra long day week the Princess Annes make good standards and fast disbuds. Price.....Y-7D

North and East—Mid-September through mid-June.

South—November through April.

West—Year round.

YGA Yellow Deluxe

Nov. 10 (10 week)—Bright, clear lemon yellow. Has all the size and strong habits of its parent Pink Deluxe. Far more durable under summer temperatures than Pink Deluxe. Useful the year round with tall treatment and especially valuable in winter when good yellows are scarce. Price.....Y-8A

YGA Splurge

Nov. 15 (11 week)—Large, golden or rich amber yellow decorative. Vivid color that is deeper and larger than Golden Yellow Princess Anne. Fine stem and foliage. Establish your plants well prior to pinching to provide for maximum breaking action. Attains 4½-5" diameter in pinched pots. Beautiful, versatile color with real sparkle and gloss that will enliven a dull winter. Requires tall treatment. Available June 5, 1961. Price.....Y-8A

North and East—October through May.

South—December through March.

West—November through April.

YGA Achievement

Nov. 20 (11 week)—Very large lemon yellow incurve for pots. Larger than Delaware. Fully double without a trace of reflexing. Has beautiful foliage well up to flowers. Breaks and spreads well. A magnificent pot variety that does well with medium or tall treatment. Nearly twice the size of Bonn. Deluxe. Its 5" flower and incurved form never fails to create much enthusiasm and favorable comment. Available June 5, 1961. Price.....Y-8A

North and East—October through May.

South—December through March.

West—November through April.

BRONZE & RED

Fujii Delaware

Nov. 8 (10 week)—Large fujii formed standard for pots. Bronze sport from Delaware. Retains the same dwarf, spreading habit and good foliage of its parent Delaware. The straight tubes do not reflex which adds inches to the size of the finished flower. Attains 6-7" blooms in single stem pots and is significantly larger than Delaware in pinched programs. The center petals remain nicely incurved masking the open centers characteristic of its parent. Color is a rich copper bronze with red spoon tips. Short treatment recommended for all periods. Fine for single stem culture. Available February 6, 1961. Price.....Y-7B

North and East—September through May.

South—September through May.

West—Year round.

NEW POT PLANT VARIETIES

BRONZE & RED—Continued

Bronze Princess Anne

Nov. 10 (10 week)—Large decorative standard. A rich amber bronze sport from Princess Anne. Well adapted to single stem or pinched pot programs with tall treatment. Price.....Y-7B

North and East—Mid-September through mid-June.

South—November through April.

West—Year round.

Apricot Princess Anne

Nov. 10 (10 week)—Large decorative standard. Warm apricot bronze. Bronze Princess Anne is the deepest copper bronze. Golden Gate is a golden bronze. The Apricot provides a rich, warm amber color that blends to perfection and enhances any arrangement. An outstanding pot plant either pinched or single stem October through mid-June. Equally valuable as a medium-sized standard in the same period. Available June 5, 1961. Price.....Y-7A

PINK

Ann Ladygo

Oct. 5 (7 week)—Small bright pink anemone. Dwarf, compact cushion habit ideal for spring pots and garden borders. Uniform and responsive in no light-no shade May pot programs or with short treatment. Best anemone available in the 7 week group. Topnotch garden variety. Price.....Y-7B

YGA Blue Ridge

Nov. 15 (11 week)—Huge pink decorative. Nearly perfect habit and response for pinched pot programs. The prolific breaking action of Blue Ridge coupled with strong stems makes 30 to 40 flower pot plants (5 R. C. pinched in a 6" pot) a reality. Achieves a peak of perfection in late fall, winter and early spring programs. Combines ideally with the same treatment as for Ice Follies, Princess Annes and Woking Scarlet responding one week later. Blue Ridge is somewhat sensitive to marginally low temperatures. Initiation and early bud development stages should be run 62-64°. With these conditions the flower is larger than Delaware and response uniformity equals it. Available February 6, 1961. Price.....Y-8A

North and East—October through May.

South—October through April.

West—October through June.

YGA Caress

Nov. 10 (10 week)—Large pink decorative. Ideally suited to pinched pot programs. Breaks freely and spreads well with a compact, strong habit. Foliage is carried well up to the flower. Its size is larger than Blue Ribbon. Extensive tests have shown uniform response the year round with medium treatment. Stronger and larger than Personality, Blue Ribbon and Mermaid with a smart flower and trim habit of growth. Available February 6, 1961. Price.....Y-8A

North and East—Year round.

South—Year round.

West—Year round.

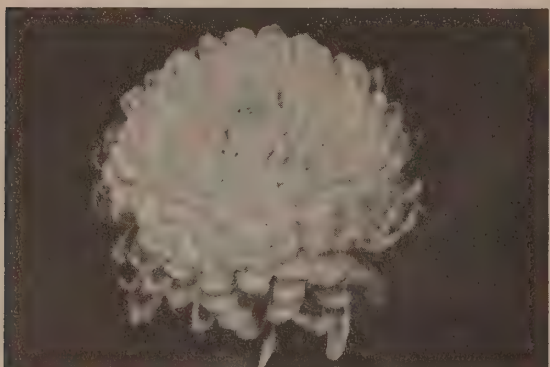
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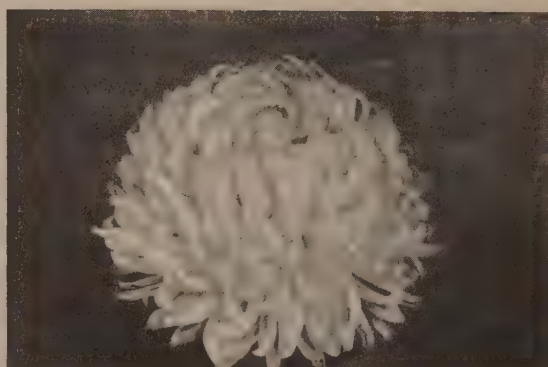
BLAZE



COLUMBIA



RAINIER





NEW VARIETIES STANDARDS

WHITE

Giant No. 4 Ind. White

Nov. 5 (10 week)—Selected from and retains all the good form of No. 3 Ind. White. It is at least 2" larger than any strain of Ind. White known. Responds with all regular Ind. varieties and has about 3" more vigor. It is as large as Fred Shoemith and has that unmatched No. 3 Ind. White form. Wonderful cool 60° variety. Available June 5, 1961. Price.....Y-8A

YGA Columbia

Nov. 10 (10 week)—Large, tightly incurved ivory white standard. Vigorous, strong and responsive with excellent foliage. Takes heat well with minimum of burn. As large as Explorer. Good shipper. A beautiful and durable mum of 5"-6" diameter. Available June 5, 1961. Price.....Y-8A

North and East—Year round.

South—November through May.

West—Year round.

No. 2 Monument

Nov. 10 (10 week)—Greatly improved selection from Monument with more vigor and stronger growth. Flower is larger with a smooth incurved form devoid of the old, characteristic crease. This stock will replace all of the original which is no longer considered a satisfactory variety. Available Feb. 1, 1961. Price.....Y-7B

Imp. Wh. Peter John

Nov. 25 (12 week)—Selection from White Peter John that provides a larger flower and better color clarity. Being used to replace all stock of the original variety. Attains a maximum of responsive uniformity. Price.....Y-7B

YELLOW

Golden Marblehead—New

Oct. 25 (9 week)—Deep yellow sport from Marblehead. Same habit and response as parent. Medium sized standard and fast disbud. Available Feb. 6, 1961. Price.....Y-7B

North and East—June through October.

South—April through October.

West—May through October.

Yellow Nightengale

Nov. 5 (10 week)—Yellow sport from Nightengale and a valuable companion for it. Can be successfully flowered mid-September through December Regular and Fast crops. Achieves maximum value on the West Coast in shaded and natural programs. Price.....Y-7B

YGA Everest

Nov. 8 (10 week)—Large yellow incurved standard. Taller than News but shorter than Explorer. Everest is more uniform and easier to grow than Good News. It is frequently larger. Requires some protection from direct sun. Best uniformity is achieved with pinched crops. Everest's uniformly large flower size, fine form, substance and summer performance makes it deserving full consideration as a replacement for Good News. Available Feb. 6, 1961. Price...Y-8A

North and East—April through mid-December.

South—Greenhouse only. March through December.

West—March through December.

No. 2 Yellow Monument

Nov. 10 (10 week)—An improved selection from Yellow Monument. Displays a larger flower with stronger growth and same response. This stock will be used to replace the original variety which is no longer considered satisfactory. Available Feb. 6, 1961. Price.....Y-7B

No. 2 Yel. Shoemith

Nov. 12 (10 week)—Displays at least one inch (1") greater diameter over Yellow Shoemith and is frequently larger than Fred Shoemith. Recommended in late October through May programs. It is 2"-3" taller than Yellow Shoemith. Available June 5, 1961. Price.....Y-8A

YGA Rainier

Nov. 14 (10 week)—Large, solid incurve. Intense golden yellow. Size and form most frequently exceed News. It is demanding of high light conditions for best development of good size and form. Available Feb. 6, 1961. Price...Y-8A

North and East—May through mid-November.

South—April through November.

West—May through November.

No. 3 Yellow Glory

Dec. 1 (12 week)—A deep yellow selection from Yellow Glory that has essentially the same size and form and will replace the original Yellow Glory. While this No. 3 selection is deeper in color than the old Yellow Glory, it is not as dark as the No. 2. It is consistently larger in size than the No. 2 Yellow Glory. Fine natural season standard that is easily delayed for Christmas with cool finish. Available Jan. 1, 1961. Price.....Y-8A

BRONZE & RED

Chambrier

Oct. 30 (9 week)—Intense reddish bronze standard and disbud. Essentially a high light, low temperature finish variety. It is unbeatable as a 5"-6" standard for pinched crops in Florida from December through March. It is equally outstanding in pinched programs for California cloth houses June through October. Available June 5, 1961. Price.....Y-8A

North and East—April through June; October through mid-November (pinched).

South—December through March (pinched).

West—June through October (pinched).

Symbol—New

Nov. 1 (9 week)—Large amber bronze decorative standard. Golden yellow in summer. Essentially a very large disbud that frequently attains standard size. Possesses outstanding high and low temperature tolerance. A superb summer variety. Its stems are quite woody with slow water uptake. Scalding readily overcomes this and is recommended. Price.....Y-7D

North and East—May through October.

South—Year round.

West—April through November.

SGA Blaze

Nov. 5 (10 week)—Larger, deeper colored version of Woking Scarlet with very similar decorative form. It has more petals and greater color contrast between the inner and outer petals than Woking Scarlet. Slightly taller than Indianapolis with stronger, more wiry stem. Fits Indianapolis programs well and can be recommended October through May. Available June 5, 1961. Price.....Y-8A

NEW VARIETIES STANDARDS

BRONZE & RED—Continued

Maple Leaves

Nov. 15 (11 week)—Very large bronze fujii mum of Japanese origin. The superb form is surpassed only by its outstanding color which is a smooth copper bronze unequalled by any presently known bronze fujii. Takes heat well with vigor and strength. Does not burn. Available June 5, 1961. Price.....Y-8A

North and East—Year round.

South—December through March.

West—Year round.

Kentucky Bronze

Nov. 15 (11 week)—Very large 11 week bronze sport from Indianapolis Pink. A Mefo companion that must be grown pinched and finished cool. Unpinched crops are crownish and flowers have long necks. At least 2" larger than Indianapolis Bronze. Natural through December. Not for year round programs. Available June 5, 1961. Price.....Y-8A

Imp. Br. Peter John

Nov. 25 (12 week)—Selection from Bronze Peter John that provides a larger flower with deeper, brighter color. Will replace all stock of the original variety. Attains greater uniformity of response than that of previous stock. Price.....Y-7B

SPORTS OF SHOESMITH SALMON

The following sports of this excellent variety will be available June 5, 1961. Flower Date December 10 (13 week).

SGA Red Shoesmith Salmon

Color is close to a maroon salmon.

SGA Ruby Shoesmith Salmon

Color is a very deep, intensified salmon.

SGA Bronze Shoesmith Salmon

Color is closely identical to Bronzechip.

SGA Apricot Shoesmith Salmon

Color resembles the new Copperchip.

Available June 5, 1961

Price Y-8A

ELITE



PINK

YGA Bluebird

Nov. 5 (10 week)—Large decorative disbud. Pink. Bred from and replaces Laughter as a summer pink disbud because it does not reflex and has better all round temperature tolerance. When dissprayed to 3-4 flowers, it is one of the largest and showiest decoratives available. Displays vigorous growth with fine heat tolerance. Bluebird attains close to standard size in Regular and Fast Crop programs. Available Feb. 6, 1961. Price.....Y-8A

North and East—mid-April through mid-November.

South—mid-March through mid-November.

West—April through mid-November.

SGA Elite

Nov. 6 (10 week)—Medium sized pink semi-incurve. Color is more of a true pink than Indianapolis Pink. Resistance to sun scald and botrytis petal blight is superior to Indianapolis. Has promise for strengthening the spring, summer and fall periods with a lively pink color and good durability especially under summer conditions. Available June 5, 1961. Price.....Y-8A

No. 2 Dark Queen

Nov. 10 (10 week)—A reselection of Dark Orchid Queen that provides a larger flower, more intense color and more vigorous growth habit. Like all Queens it is best grown single stem in early winter programs. Initiation and early development requires 62°-64° minimum temperatures. Price.....Y-7D

North and East—Mid-September through Mid-June.

South—October through May.

West—Year round.

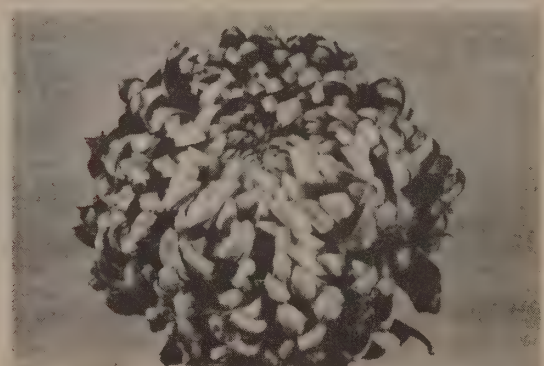
Kentucky Pink

Nov. 15 (11 week)—At least 2" larger than Ind. Pink with a later, 11-week response. Flowers right with Mefo. Requires a pinch to offset its tendency to crown and produce long necks. Taller, larger, later sport from Ind. Pink. Natural through December. Finish cool. Not for year round programs. Available June 5, 1961. Price.....Y-8A

SGA Shoesmith Salmon

Dec. 10 (13 week)—Large decorative standard. Rosy salmon pink. It is not a sport of Fred Shoesmith and is entirely different from it in all respects. Shoesmith Salmon is shorter than most 13 week natural flowering varieties. It has clean, strong stems with excellent foliage well up to the flower. The rather dwarf habit breaks slowly but grows rapidly thereafter. Keeping quality is excellent. Shoesmith Salmon essentially provides a bright, new color in an important season. It must be finished cool. Any reduction in growing time will decrease size. Single stem crops should be planted no later than August 8. Available June 5, 1961. Price.....Y-8A

DARK QUEEN





NEW VARIETIES

POMPONS SINGLES AND ANEMONES

WHITE

Candleglow

Oct. 1 (7 week)—White pompon. Outdoor cut flower. Strong, upright habit. Dependable performance due to its excellent tolerance of extreme summer heat. Larger and earlier than Classic or Horizon. **Available Feb. 6, 1961.** Price.....Y-7B

YGA Alabaster

Oct. 25 (9 week)—Pure white intermediate daisy. Has the clear white color of Memento and the production and heat tolerance of Chips. Possesses fine substance with tight green discs and very little pollen. More productive than Halo and more dependable under summer high temperatures than Memento. **Available Feb. 6, 1961.** Price.....Y-7A

North and East—May through October.

South—March through December.

West—April through November.

YGA Cloudbank

Oct. 25 (9 week)—Pure white anemone. Intermediate size. A vigorous, productive, fast responding variety that is best given ten week timing. Fine tolerance of high temperature. Develops cushions well in all recommended periods. Of medium substance, its ships and keeps well. **Available Feb. 6, 1961.** Price.....Y-8A

North and East—May through mid-November.

South—March through December.

West—April through mid-November.

Whitechip

Nov. 1 (9 week)—White sport from Bluechip. Clearest color and best form of many white Chip sports studied. When finished cool it becomes a light shell pink. Under efficient air-cooled units in summer it sometimes displays these tinges. **Available Feb. 6, 1961.** Price.....Y-8A

North and East—June through September.

South—May through October.

West—Not recommended for California.

YGA Sovereign

Nov. 5 (10 week)—Intermediate anemone. White ray and white cushion. Growth is vigorous and productive with excellent cushion development under high temperatures. High temperature extremes cause some twistage of ray petals. Size is a little smaller than Shasta with higher production, stronger habit and far better durability. Pinks slightly with very low temperature finish. Dependable in all periods and areas recommended for Shasta. **Available Feb. 6, 1961.** Price.....Y-8A

North and East—Regular and Fast Crops April through mid-November.

South—March through June; Sept. through Dec.

West—March through December.

YGA Hurricane

Nov. 5 (10 week)—Intermediate white decorative pompon. A Bluechip that is as pure white as Pristine. Bred from Iceberg. Never pinks with cool finish. Larger than Chips with superb high temperature tolerance. Production is very heavy, exceeding the Chips and equalling Iceberg. Possesses excellent substance and never displays any open center. **Available Feb. 6, 1961.** Price.....Y-8A

North and East—April through mid-November.

South—March through December.

West—April through November.

YGA Milady

Nov. 10 (10 week)—Large pure white anemone. A little America seedling bred to provide heat tolerance, improved cushion development and retain the clear white color of its parent. Sprays are sometimes clustered, a condition readily corrected by center bud removal. A beautiful, breathtaking variety that is not one for the shipper. **Available June 5, 1961.** Price.....Y-8A

North and East—May through mid-November.

South—March through December.

West—April through November.

YGA Coronado

Nov. 10 (10 week)—Clear white daisy. More vigorous and productive than Memento. Tolerates summer temperatures well. It has substance, a good green eye and petals remain straight with no reflexing. A proven shipper with vigor and habit that resembles Delight. Sprays are clean and terminal. Very slight pinking when finished below 56°. Heavy petalage. **Available Feb. 6, 1961.** Price.....Y-8A

North and East—April through November.

South—March through December.

West—March through December.

YGA Skyline

Nov. 10 (10 week)—Large formal pompon. Ivory white. More rounded, formal and frequently larger than Iceberg. An Iceberg seedling with the same vigorous habit. The sprays are more open and always terminal with longer pedicels. Displays fine heat tolerance and no evidence of shatter. Production and growth are seldom as heavy as Iceberg but this is frequently offset by its larger flower. **Available Feb. 6, 1961.** Price.....Y-8A

North and East—Regular and Fast Crops April through mid-November.

South—Year round.

West—March through December.

YGA Cloudburst

Nov. 10 (10 week)—Large, white decorative pompon. Almost two times the size of Whitetop. Soft, but ships and takes water flawlessly. Very responsive and productive. Vigorous and efficient in regular and fast crops. Very tolerant of high temperature. Practice center bud removal for maximum spray quality. Color is pure white and no pink tinging has ever been observed. Far superior to Whitetop in summer programs. **Available June 5, 1961.** Price.....Y-8A

North and East—Mid-April through mid-November.

South—December through June.

West—Mid-April through mid-November.

PRICE TABLE

All prices are per 100 cuttings, except fifty cuttings are priced per 50.

PRICE		PRICE PER 100 CUTTINGS				
CLASS	50 ONLY	100-250	300-450	500-950	1000 & UP	
Y-8A	\$4.50	\$8.75	\$8.50	\$8.25	\$8.00	
Y-7D	4.38	8.50	8.25	8.00	7.75	
Y-7C	4.25	8.25	8.00	7.75	7.50	
Y-7B	4.13	8.00	7.75	7.50	7.25	
Y-7A	4.00	7.75	7.50	7.25	7.00	

Prices above less Earned Credit Discount



NEW VARIETIES POMPONS SINGLES AND ANEMONES

WHITE—Continued

YGA Lightning

Nov. 15 (11 week)—Very large white pompon. An 11 week Iceberg of greater size and even stronger plant. Good winter growth and response but petals become quite tubular and shattering has been observed. It should be cut on the green side and not shipped any great distance. The largest and showiest white pompon known. Available June 5, 1961. Price.....Y-8A

North and East—October through December; March through mid-May.

South—Not for outdoor culture.

West—No.

YGA Bride

Nov. 15 (11 week)—Small, white anemone with pure white cushion. Substance is good with extremely high production. Fine at cool 60° but do not finish extremely cold as it will develop some pinking. Practice center bud removal but do not dispray. Keep temperatures up to 62°-64° during bud initiation periods. Available June 5, 1961. Price....Y-8A

North and East—March through mid-May; October through December.

South—March through May.

West—October through April.

YGA Divinity

Nov. 20 (11 week)—Pure white intermediate anemone. Flowers with Shane and provides an ideal white companion for it. It is smaller than Shane, about Shasta size and height. Produces well but is intolerant of high temperature. A durable shipper. Available June 5, 1961. Price.....Y-8A

North and East—Mid-October through April.

South—December through March.

West—November through April.

YGA Iceflo

Dec. 10 (13 week)—Intermediate white pompon. An enlarged version of Icecap. Result of a breeding objective to increase the size, improve the spray and retain all the vigor, production and responsive uniformity of Icecap. Response is about five days later. Available June 5, 1961. Price.....Y-8A

North and East—December through mid-March.

South—No.

West—No.

YELLOW

Yellow Bow

Oct. 25 (9 week)—Yellow sport of Silver Bow. Large pompon popular as an All Saint's Day disbud. Shows excellent tolerance of both high and low temperatures. Available Feb. 6, 1961. Price.....Y-7B

YGA Sunbeam

Oct. 30 (9 week)—Intermediate to large golden yellow daisy. Petals are broad and durable. Substance and production are superior to Happiness with equal tolerance for high temperature. Smart, terminal sprays. Clean, vigorous growth. Considered by most observers to be close to the ultimate in superior yellow daisies. Available Feb. 6, 1961. Price.....Y-8A

North and East—May through October.

South—March through December.

West—April through mid-November.

YGA Imperial

Nov. 5 (10 week)—Deep golden yellow intermediate pompon. Larger than Yellow Iceberg and somewhat more decorative in form. Produces more flowers per spray than Iceberg and can be overcropped. Should always be grown single stem or pruned on pinched crops. Takes heat well. Surpasses the Yellow Icebergs for size, quality and production. Available June 5, 1961. Price.....Y-8A

North and East—Mid-April through mid-November.

South—December through April.

West—Mid-April through mid-November.

YGA Yellow Stardust

Nov. 12 (10 week)—Intermediate formal pompon. Bright lemon yellow sport from Stardust. Clear and beautiful color. Preferred over the Golden during high temperature periods when it fades less and looks brighter. Tolerates a 56° minimum. Price.....Y-8A

North and East—April through mid-November.

South—Year round.

West—Year round.

YGA Golden Stardust

Nov. 12 (10 week)—Intermediate formal pompon. Golden yellow sport from Stardust. Identical habit and response. Color is clear at all temperatures. Tolerates a 56° minimum. Clean, vigorous growth. It is a durable and dependable shipper. Best with cool 60° or lower finishing temperatures. Price.....Y-7D

North and East—April through mid-November.

South—Year round.

West—Year round.

YGA Highball

Nov. 15 (11 week)—Intermediate deep yellow pompon. Vigorous and responsive in winter programs but is somewhat thin and sparse. Fine spring and fall variety. Durable and dependable in outdoor cloth houses. Available June 5, 1961. Price.....Y-8A

North and East—October through mid-November; March through mid-May.

South—December through March.

West—October through November; March through April.

YGA Old Gold

Nov. 15 (11 week)—Deep golden yellow intermediate decorative. Color is very intense and brilliant. Displays about the best low temperature tolerance yet observed in the 11 week group. Habit has vigor and production serving well the purpose of a golden yellow Jubilation. Available June 5, 1961. Price.....Y-8A

North and East—October through mid-December; March through mid-May.

South—December through March.

West—October through mid-December; March through mid-May.

YGA Kingpin

Dec. 5 (13 week)—Intermediate deep yellow, formal pompon. The best answer to date for a yellow Icecap. Shorter habit, always terminal, smart and responsive. More uniform and dependable than Corsair. It will add greatly to finer yellow pompoms in northern winter programs. Available June 5, 1961. Price.....Y-8A

North and East—Mid-November through March.

South—No.

West—No.



NEW VARIETIES

POMPONS SINGLES AND ANEMONES

YELLOW—Continued

Yellow Illini Cascade

Jan. 5 (15 week)—Large, lemon yellow sport from Illini Cascade. Valuable natural or lighted in winter programs. Vigor and growth habit remain the same as parent variety. Available June 5, 1961. Price.....Y-8A

North and East—December through February.

South—No.

West—No.

BRONZE & RED

Nobility

Oct. 5 (7 week)—Large decorative. Maroon red. Early, prolific and extremely colorful. Plants are strong and best adapted to cut crops. Height is medium. Habit compact and bushy. Has all the size, production and habit to replace Red Velvet. Available Feb. 6, 1961. Price.....Y-7B

Remember Me

Oct. 10 (7 week)—Large red spoon, bronze tubes. Earliest and largest red spoon known. Very showy novelty. Vigorous, somewhat tall and best suited to natural outdoor cut and background garden variety use. Flower diameter frequently exceeds 4". Try some disbudded. It is almost a 7-week Duchess. Available Feb. 6, 1961. Price.....Y-7B

Flame Gaiety

Oct. 25 (9 week)—Intermediate, bittersweet red daisy. Sport from Gaiety. Its brilliant color is combined with excellent durability. Color retention is superior to Gaiety. Fine greenhouse variety with good low temperature tolerance. Price.....Y-7D

North and East—May through June; mid-September through October.

South—November through January; April and May.

West—April through October.

Panorama

Oct. 25 (9 week)—Large, vivid bronze decorative. Vigorous habit. The largest pompon available to the 9-week group. Tight sprays require center bud removal. Good high temperature tolerance and outstanding color retention. Always showy and colorful. Can also be disbudded. Price.....Y-8A

North and East—May through October.

South—March through December.

West—April through November.

Copperchip

November 1 (9 week)—Clear, bright amber bronze sport from Bronzechip. More resistant to high temperature fading and dulling of color. A strikingly beautiful color of instant appeal. Entirely different from Bronzechip. Price.....Y-7D

North and East—May through mid-November.

South—Year round.

West—April through November.

Red Jetfire

Nov. 5 (10 week)—Intense red sport from Jetfire. Color is more resistant to fading than original. Vigor and habit appear identical to the parent variety. Disspray procedure in summer will improve response. More efficient than Rubaiyat in fall shading programs. Cloth house crops require that soil sterilization be practiced. Available Feb. 6, 1961. Price.....Y-8A

North and East—Mid-April through mid-November.

South—November through May.

West—April through mid-November.

YGA Bronze Etude

Nov. 15 (11 week)—Light bronze sport from Etude. Requires cool finish for good color expression and is, therefore, best suited to cloth house environments. Has high production and uniform response with smaller, more formal flower form. Available June 5, 1961. Price.....Y-8A

North and East—October through November.

South—(Florida) December through February.

West—October to November; March to April.

Copper Jubilation

Nov. 15 (11 week)—True copper bronze sport from Jubilation. Does not fade as rapidly as the original Bronze Jubilation. A brighter, livelier and more desirable color. Available June 5, 1961. Price.....Y-8A

Dark Bronze Ranger

Nov. 15 (11 week)—Red bronze sport from Ranger. Color closely resembles Beauregard and holds well. Fine late cloth house variety. Very dependable in spring and fall. Available June 5, 1961. Price.....Y-8A

North and East—Mid-Sept. to Nov.; mid-March to May.

South—November through February.

West—Mid-Sept. to Nov.; mid-March to May.

YGA Rebel

Nov. 20 (11 week)—Intense red daisy. Good red daisies that will produce and ship are all but unknown. Rebel will do this and more. It will light for Christmas and is extremely dependable all winter. The color holds and holds. It's a shining new start with five sharp points: color, production, vigor, response and durability. Available June 5, 1961. Price.....Y-8A

North and East—October through April.

South—December through March.

West—October through April.

YGA Dragon

Nov 25 (12 week)—Bright red intermediate pompon. Outstanding growth habit with vigor, production and fine spray formation. Responds uniformly. Bred to extend the value of Rubaiyat in northern programs, it lights well and is more tolerant of low temperature than Cardinal Jetfire color that is bright and versatile especially at Christmas and Valentine's Day. Available June 5, 1961. Price.....Y-8A

North and East—Mid-October through mid-April.

South—December through February.

West—November through March.

NEW VARIETIES POMPONS SINGLES AND ANEMONES

BRONZE & RED—Continued

YGA Beau Brummell

Dec. 20 (14 week)—Brilliant golden bronze pompon. Strong, productive growth with a bright, glowing color that greatly enhances winter programs. Sprays are normally terminal with flowers of Iceberg size and form. Available June 5, 1961. Price.....Y-8A

North and East—December through February.

South—No.

West—No.

PINK

Pearl Chip

Nov. 1 (9 week)—Luminous shell pink or appleblossom sport from Bluechip. Available June 5, 1961. Price.....Y-8A

North and East—May, June; mid-Sept. to mid-Nov.

South—December through mid-March.

West—April through November.

Cherrychip

Nov. 1 (9 week)—Rose pink sport from Bluechip. A scintillating new color that holds well into the warm period of summer. Fading is minimum. Same vigorous growth and production as parent. Price.....Y-7D

North and East—May through mid-November.

South—Year round.

West—April through November.

YGA Overture

Nov. (10 week)—Large, luminous pink pompon. Sets a new standard for size, close to 4", vigor and production in pink spray pompoms. Bred to provide a pink Iceberg, it has exceeded all expectations. Practice center bud removal and be prepared to enjoy a giant version of Portrait. Sprays are normally open and terminal. Shows little or no heat delay. Fading is seldom a problem but retention of shade to color and all possible attention to reduction of high temperature extremes will provide a superior product. Available Feb. 6, 1961. Price.....Y-8A

North and East—April through mid-November.

South—Year round.

West—Year round.

BEAU BRUMMELL



YGA Excello

Nov. 10 (10 week)—Intermediate pink daisy. Smart, terminal sprays with fine color and green eyes. Retains color well during high temperature periods with minimum pollen to mar disks. A successor to Reward. It is more durable in all respects. Sprays are more terminal; habit more vigorous. Flowers with Icebergs. Available Feb. 6, 1961. Price.....Y-8A

North and East—April through November.

South—March through December.

West—March through December.

Pink Jubilation

Nov. 15 (11 week)—Smooth, glistening light pink sport from Jubilation with no overtones of bronze. Color holds well and is far more popular than parent color. Same good vigor and production. Available June 5, 1961. Price.....Y-8A

North and East—Oct. to mid-Dec.; March to mid-May.

South—December through February.

West—Oct. to mid-Dec.; March to mid-May.

YGA Signet

Nov. 20 (11 week)—Intermediate pink anemone with contrasting yellow cushion. Strong and productive. Has substance and ships well. Different, attractive and versatile color. Available June 5, 1961. Price.....Y-8A

North and East—October through April.

South—December through March.

West—October through April.

YGA Delmarvel

Nov. 20 (11 week)—Intermediate pink pompon. Marvelous new version of Delmar. Larger, more productive, more colorful with faster response and superior vigor throughout the winter period. It has all the qualities needed to achieve top rank for pink poms in this period. This is a "must have" in all spray programs. Available June 5, 1961. Price...Y-8A

North and East—October through April.

South—December through mid-March.

West—October through March.

DELMARVEL



VARIETIES FOR YEAR-ROUND STANDARDS

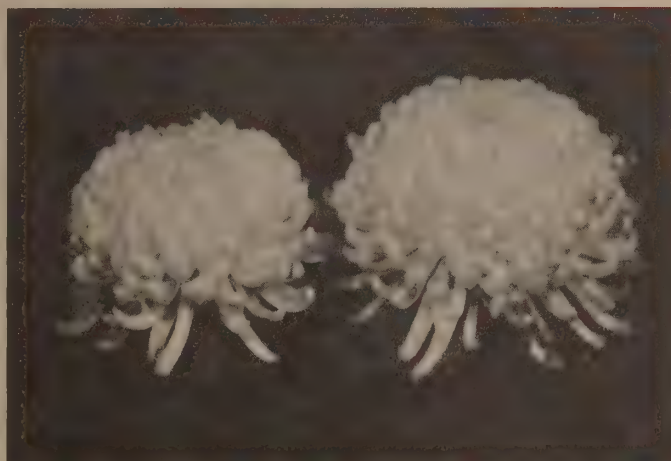
WHITE

	Variety	Description	Natural Flowering Date	Price Code
8 WEEK PINCH JULY 17	White Pink Chief.....	Intermediate pure white incurve.....	Oct. 15	Y-6A
	Silver Sheen.....	Intermediate white incurve.....	Oct. 20	Y-6B
	No. 2 White Chief.....	White incurve.....	Oct. 20	Y-7C
9 WEEK PINCH JULY 24	Marblehead.....	Medium clear white incurve.....	Oct. 25	Y-6D
	Ambassador.....	Large ivory incurve.....	Oct. 25	Y-7A
	Albatross.....	White incurve.....	Nov. 1	Y-6A
	YGA Themesong.....	Medium ivory white semi-incurved disbud.....	Nov. 1	Y-7D
10 WEEK PINCH JULY 31	Giant No. 4 Ind. White.....	(June '61) Selected from No. 3 Ind. White.....	Nov. 5	Y-8A
	Indianapolis White.....	Large white incurve.....	Nov. 5	Y-5C
	Imp. Ind. White.....	Large white.....	Nov. 5	Y-5C
	No. 3 Ind. White.....	Large white incurve.....	Nov. 5	Y-5C
	White Prince.....	Intermediate pure white incurve.....	Nov. 5	Y-8A
	Giant Betsy Ross.....	Large white incurve.....	Nov. 5	Y-5C
	Columbia (June '61).....	Large, tightly incurved ivory white standard.....	Nov. 10	Y-8A
	Crystal Queen.....	Pure white sport from Orchid Queen.....	Nov. 10	Y-7A
	Mefo.....	Large ivory incurve.....	Nov. 10	Y-5C
	The Favourite.....	Large white incurve.....	Nov. 10	Y-8A
	No. 2 Monument.....	Greatly improved selection from Monument.....	Nov. 10	Y-7B
	Fred Shoesmith.....	Large white incurve.....	Nov. 12	Y-6A
11 WEEK PINCH AUGUST 7	Sterling.....	Large pure white incurve.....	Nov. 15	Y-7D
	Marketeer.....	Intermediate chalk white incurve.....	Nov. 18	Y-6C
12 WEEK PINCH AUGUST 14	Imp. White Peter John.....	Selection from White Peter John.....	Nov. 25	Y-7B
	Chattanooga.....	Large pure white incurve.....	Nov. 25	Y-6C
	December Glory.....	Intermediate white incurve.....	Dec. 1	Y-7C
	Margaret Moeller.....	Intermediate white incurve.....	Dec. 3	Y-7D
13 WEEK PINCH AUGUST 21	Smith's White.....	Intermediate white semi-incurve.....	Dec. 10	Y-6C
	December White.....	Intermediate white incurve.....	Dec. 15	Y-7A
	Snowline.....	Large showy white flower.....	Dec. 20	Y-7B

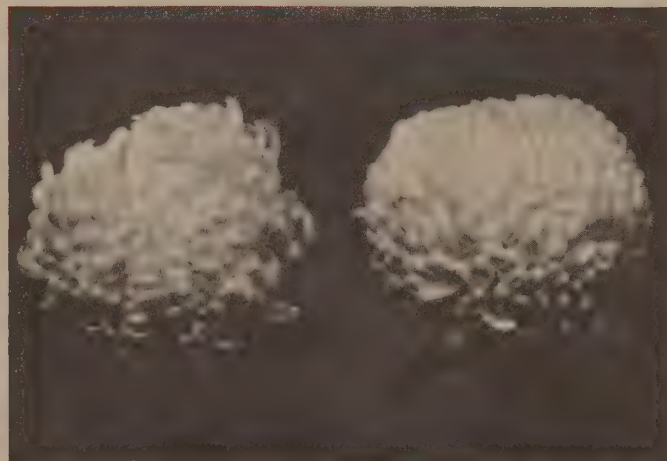
YELLOW

8 WEEK PINCH JULY 17	Gold Lode.....	Intermediate lemon yellow reflex.....	Oct. 15	Y-6C
	Harvest Golden.....	Large deep golden yellow decorative.....	Oct. 15	Y-8A
	Celestra.....	Small deep lemon yellow semi-incurve.....	Oct. 15	Y-8A
	Mrs. Kidder.....	Large golden yellow incurve.....	Oct. 20	Y-6B
	Butterball.....	Intermediate deep lemon incurve.....	Oct. 20	Y-7D
	Blazing Gold.....	Intermediate golden yellow semi-incurve.....	Oct. 23	Y-6D

GIANT #4 IND. WHITE VS. #3 IND. WHITE



#2 MONUMENT VS. MONUMENT





VARIETIES FOR YEAR-ROUND STANDARDS

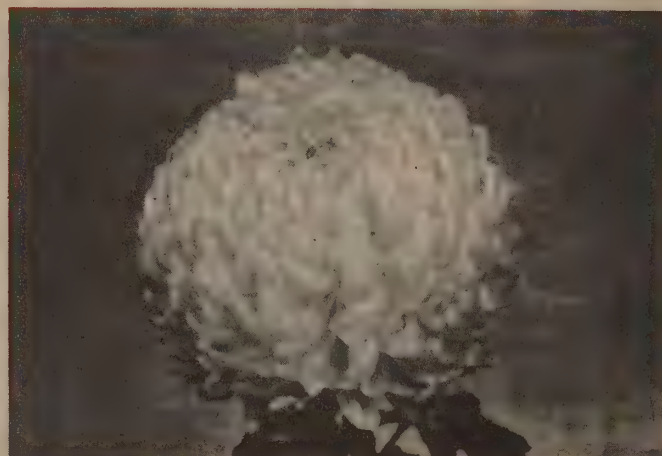
YELLOW—Continued

	Variety	Description	Natural Flowering Date	Price Code
9 WEEK PINCH JULY 24	Yellow Marblehead.....	Medium lemon yellow incurve.....	Oct. 25	Y-6C
	Golden Marblehead.....	Deep yellow sport from Marblehead.....	Oct. 25	Y-7B
	Yellow Ambassador.....	Intermediate light lemon yellow incurve.....	Oct. 25	Y-6D
	Mecca.....	Large deep lemon yellow incurve.....	Oct. 25	Y-7C
	Sunglow.....	Large golden yellow incurve.....	Oct. 25	Y-7B
	Yellow Albatross.....	Large lemon yellow sport from Albatross.....	Nov. 1	Y-8A
	Good News.....	Large deep yellow incurve.....	Nov. 1	Y-6A
	Yellow Ivanhoe.....	Golden yellow sport from Ivanhoe.....	Nov. 1	Y-8A
	Golden Boy.....	Deep lemon yellow incurved standard.....	Nov. 1	Y-7C
10 WEEK PINCH JULY 31	Imp. Ind. Yellow.....	Light golden yellow selection of Ind. Yellow.....	Nov. 5	Y-5C
	Indianapolis Yellow.....	Large lemon yellow incurve.....	Nov. 5	Y-5C
	Indianapolis Gold.....	Large golden yellow incurve.....	Nov. 5	Y-6A
	Dk. Ind. Yellow.....	Deep lemon yellow.....	Nov. 5	Y-7A
	Yellow Prince.....	Intermediate yellow incurve.....	Nov. 5	Y-8A
	Chairman.....	Large golden yellow decorative.....	Nov. 5	Y-8A
	YGA Explorer.....	Large deep yellow incurve.....	Nov. 5	Y-7C
	Yellow Betsy Ross.....	Intermediate lemon yellow incurve.....	Nov. 5	Y-6D
	YGA Everest.....	Large yellow incurve.....	Nov. 8	Y-8A
	Yellow Marvel.....	Large deep lemon yellow ball-shaped incurve.....	Nov. 8	Y-8A
	Cream Yel. Princess Anne.....	Large cream yellow decorative.....	Nov. 10	Y-7A
	Gol. Yel. Princess Anne.....	Large sulfur yellow decorative.....	Nov. 10	Y-6C
	Yellow Queen.....	Large light lemon semi-incurve.....	Nov. 10	Y-7B
	No. 2 Yellow Queen.....	Deep lemon yellow sport of Yellow Queen.....	Nov. 10	Y-8A
	Yellow Mefo.....	Large deep lemon incurve.....	Nov. 10	Y-6A
	Cream Mefo.....	Cream yellow sport from Mefo.....	Nov. 10	Y-6D
	No. 2 Yellow Monument.....	Improved selection from Yellow Monument.....	Nov. 10	Y-7B
	Golden Favourite.....	Large bright yellow semi-incurve.....	Nov. 10	Y-8A
	Golden Shoemith.....	Large intensified yellow incurved.....	Nov. 12	Y-6D
11 WEEK PINCH AUGUST 7	Yellow Shoemith.....	Large yellow incurve.....	Nov. 12	Y-6B
	No. 2 Yellow Shoemith.....	(June '61) Jumbo yellow sport.....	Nov. 12	Y-8A
	YGA Rainier.....	Large intense golden yellow solid incurve.....	Nov. 14	Y-8A
	Yellow Marketeer.....	Lemon yellow sport from Marketeer.....	Nov. 18	Y-7C
12 WEEK PINCH AUGUST 14	Friendly Rival.....	Intermediate intense golden yellow incurve.....	Nov. 20	Y-7B
	Harvester.....	Intermediate deep lemon yellow incurve.....	Nov. 23	Y-6B
	Marie DePetris.....	Intermediate deep yellow incurve.....	Nov. 23	Y-6D
	Yellow Peter John.....	Large light lemon yellow decorative.....	Nov. 25	Y-7B
	Dk. Yel. Chattanooga.....	Deep lemon yellow sport.....	Nov. 25	Y-6D
	Yellow Chattanooga.....	Large light lemon incurve.....	Nov. 25	Y-6D
	Golden Pearson.....	Intermediate light lemon incurve.....	Nov. 25	Y-7A
	Sungold.....	Large lemon yellow incurve.....	Nov. 25	Y-7B
	No. 3 Yellow Glory.....	Will replace the original Yellow Glory.....	Dec. 1	Y-8A
	No. 2 Yellow Glory.....	Dark yellow selection from Yellow Glory.....	Dec. 1	Y-8A
	Golden Mrs. Ross.....	Large deep lemon incurve.....	Dec. 3	Y-6C
	Golden Moeller.....	Intermediate golden yellow incurve.....	Dec. 3	Y-8A

KENTUCKY BRONZE



EVEREST





VARIETIES FOR YEAR-ROUND STANDARDS

YELLOW—Continued

	Variety	Description	Natural Flowering Date	Price Code
13 WEEK PINCH AUGUST 21	Tobin's Yellow.....	Intermediate deep lemon semi-incurve.....	Dec. 10	Y-6C
	Smith's Yellow.....	Lemon yellow sport from Smith's White.....	Dec. 10	Y-7A
	Smith's Cream White.....	Smooth cream colored sport from Smith's White.....	Dec. 10	Y-7B
	Meteore.....	Intermediate deep lemon semi-incurve.....	Dec. 13	Y-7A
BRONZE & RED				
8 WEEK PINCH JULY 17	Amber Bright.....	Large golden bronze decorative.....	Oct. 15	Y-6D
	Mayford Titan.....	Intermediate intense golden bronze incurve.....	Oct. 24	Y-8A
9 WEEK PINCH JULY 24	Sundown.....	Orange bronze disbud.....	Oct. 25	Y-8A
	Mrs. Palmero.....	Medium maroon red semi-incurve.....	Oct. 28	Y-8A
	Bronze Palmero.....	Medium coral bronze semi-incurve.....	Oct. 28	Y-8A
	Chambrier (June '61).....	Intense reddish bronze standard and disbud.....	Oct. 30	Y-8A
	Symbol.....	Large amber bronze decorative disbud.....	Nov. 1	Y-7D
	Ivanhoe.....	Russet bronze disbud.....	Nov. 1	Y-8A
	Detroit News.....	Large reddish bronze incurve.....	Nov. 1	Y-6C
10 WEEK PINCH JULY 31	Fred Yule.....	Intermediate orange bronze incurve.....	Nov. 3	Y-7A
	SGA Blaze (June '61).....	Larger, deeper colored version of Woking.....	Nov. 5	Y-8A
	Indianapolis Bronze.....	Large bronze incurve.....	Nov. 5	Y-5C
	Indianapolis Apricot.....	Intermediate warm apricot bronze incurve.....	Nov. 5	Y-8A
	Dk. Ind. Bronze.....	Dark reddish bronze sport.....	Nov. 5	Y-5C
	Bronze Prince.....	Intermediate bronze incurve.....	Nov. 5	Y-8A
	Anaconda.....	Large red bronze incurve.....	Nov. 8	Y-7B
	Woking Scarlet.....	Large brilliant scarlet bronze decorative disbud.....	Nov. 10	Y-7A
	Golden Gate.....	Large golden bronze decorative disbud.....	Nov. 10	Y-6C
	Bronze Princess Anne.....	Large rich amber bronze sport of Princess Anne.....	Nov. 10	Y-6C
	Br. Orchid Queen.....	Buff coral bronze sport.....	Nov. 10	Y-8A
	Copper Queen.....	Large copper bronze incurve.....	Nov. 10	Y-7A
	Mrs. Roy.....	Large red incurve with copper reverse.....	Nov. 13	Y-6D
	Garnet King.....	Intermediate deep crimson red reflex.....	Nov. 13	Y-7D
11 WEEK PINCH AUGUST 7	Kentucky Bronze.....	(June '61) Bronze sport from Indianapolis Pink.....	Nov. 15	Y-8A
	Maple Leaves (June '61).....	Very large bronze fujii mum.....	Nov. 15	Y-8A
	Balcombe Perfection.....	Intermediate copper bronze incurve.....	Nov. 18	Y-7B
	Red Balcombe Perfection.....	Bright red sport with copper bronze reverse.....	Nov. 18	Y-7B
	Calvert's Gold.....	Intermediate golden bronze semi-incurve.....	Nov. 20	Y-7A
	Calvert's Orange.....	Large reddish orange semi-incurve.....	Nov. 20	Y-8A
	Valentine.....	Large red disbud decorative.....	Nov. 20	Y-7A
12 WEEK PINCH AUGUST 14	Beacon.....	Large rich reddish bronze semi-incurve.....	Nov. 20	Y-8A
	Imp. Br. Peter John.....	Selection from Bronze Peter John.....	Nov. 25	Y-7B
	Gladys Pearson.....	Intermediate light copper bronze incurve.....	Nov. 25	Y-7A
	Oak Leaf.....	Intermediate copper incurve.....	Nov. 25	Y-6B
	No. 2 Oak Leaf.....	Tightly incurved sport from Oak Leaf.....	Nov. 25	Y-6C
	Muto's Crimson.....	Intermediate deep crimson incurve.....	Dec. 1	Y-7D

CHAMBRIER



MAPLE LEAVES





VARIETIES FOR YEAR-ROUND STANDARDS

BRONZE & RED—Continued

	Variety	Description	Natural Flowering Date	Price Code
12 WEEK	SGA Red Shoesmith Salmon—(June '61)—Maroon salmon disbud.....		Dec. 10	Y-8A
PINCH	SGA Ruby Shoesmith Salmon—(June '61)—Deep, intensified salmon disbud.....		Dec. 10	Y-8A
AUGUST 14	SGA Bronze Shoesmith Salmon—(June '61)—Closely identical to Bronzschip disbud..		Dec. 10	Y-8A
	SGA Apricot Shoesmith Salmon—(June '61)—Resembles the new Copperchip disbud..		Dec. 10	Y-8A

PINK

8 WEEK	Pink Chief.....	Large lavender incurve.....	Oct. 15	Y-7A
PINCH	Major Bowes.....	Intermediate lavender incurve.....	Oct. 20	Y-7A
JULY 17				
9 WEEK				
PINCH	YGA Miss America.....	Intermediate pink semi-incurve.....	Nov. 1	Y-8A
JULY 24				
10 WEEK	Indianapolis Pink.....	Large pink incurve.....	Nov. 5	Y-5C
PINCH	YGA Vanguard.....	Intermediate bright lavender pink incurve.....	Nov. 5	Y-7B
JULY 31	YGA Bluebird.....	Large pink decorative disbud.....	Nov. 5	Y-8A
	J. W. Prince.....	Intermediate lavender pink incurve.....	Nov. 5	Y-8A
	SGA Elite (June '61).....	Medium sized pink semi-incurve.....	Nov. 6	Y-8A
	Princess Anne.....	Large salmon pink decorative disbud.....	Nov. 10	Y-6C
	Rosamund.....	Medium rose pink with coral overtone disbud.....	Nov. 10	Y-8A
	Orchid Queen.....	Large light orchid pink semi-incurve.....	Nov. 10	Y-7C
	Lavender Queen.....	Lavender sport of Orchid Queen.....	Nov. 10	Y-7D
	Dk. Orchid Queen.....	Large deep lavender semi-incurved standard.....	Nov. 10	Y-7A
	No. 2 Dark Queen.....	Dark pink reselection of Dark Orchid Queen.....	Nov. 10	Y-7D
	Laughter.....	Intermediate light lavender pink decorative.....	Nov. 10	Y-6D
	Pink F. Shoesmith.....	Light pink sport from Fred Shoesmith.....	Nov. 12	Y-8A
	YGA Tradewind.....	Large bright shell pink semi-incurve.....	Nov. 13	Y-8A
11 WEEK	Kentucky Pink (June '61).....	Taller, larger, later sport from Ind. Pink.....	Nov. 15	Y-8A
PINCH	Calvert's Pink.....	Intermediate orchid pink incurve.....	Nov. 17	Y-7C
AUGUST 7	Helen Frick.....	Intermediate light lavender incurve.....	Nov. 20	Y-7C
	Thanksgiving Pink.....	Intermediate orchid pink decorative.....	Nov. 23	Y-7A
	Ed. Seidewitz.....	Intermediate smooth lavender incurve.....	Nov. 23	Y-7D
12 WEEK				
PINCH	YGA Royal.....	Medium to large deep pink decorative.....	Nov. 25	Y-8A
AUGUST 14	Pink Peter John.....	Large light orchid pink decorative.....	Nov. 25	Y-7A
13 WEEK				
PINCH	Pink Mistletoe.....	Intermediate light pink incurve.....	Dec. 5	Y-7B
AUGUST 21	SGA Shoesmith Salmon.. (June '61) Large decorative.....		Dec. 10	Y-8A

KENTUCKY PINK



SHOESMITH SALMON





SPIDER AND FUJII VARIETIES

WHITE

	Variety	Description	Natural Flowering Date	Price Code
9 WEEK	Silver Queen.....	White Fujii mum.....	Oct. 25	Y-8A
	Donlope's White Spider.....	Large ivory white spider.....	Nov. 1	Y-7B
	Queen's Lace.....	Large white spider.....	Nov. 1	Y-6C
10 WEEK	White Mary Garden.....	White sport of Mary Garden.....	Nov. 1	Y-8A
	White Rayonnante.....	White spider, straight tube.....	Nov. 5	Y-8A
	Susan Leighton.....	Large ivory white spider.....	Nov. 6	Y-8A
11 WEEK	John Baumann.....	Large paper white duplex form spider.....	Nov. 20	Y-8A

YELLOW

9 WEEK	Luyona.....	Lemon yellow spider.....	Oct. 25	Y-6A
	Yellow Lace.....	Lemon yellow spider.....	Nov. 1	Y-7B
	Gold Lace.....	Golden yellow sport.....	Nov. 1	Y-6C
10 WEEK	Nightingale.....	Chartreuse green spider.....	Nov. 5	Y-7B
	Yellow Nightingale.....	Yellow sport from Nightingale.....	Nov. 5	Y-7B
	Imp. Yellow Rayonnante.....	Clear yellow spider.....	Nov. 5	Y-8A
	Yellow Leighton.....	Large lemon yellow delicate spider.....	Nov. 6	Y-8A

BRONZE & RED

9 WEEK	Duchess.....	Medium to large bronze spider.....	Nov. 1	Y-7B
10 WEEK	Gena Harwood.....	A bronze Rayonnante.....	Nov. 5	Y-8A
	Nomago.....	Light bronze spider.....	Nov. 5	Y-8A
	Waikiki.....	Red bronze spider.....	Nov. 13	Y-8A
11 WEEK	Maple Leaves (June '61).....	Large Fujii-formed standard.....	Nov. 15	Y-8A
	Mrs. Eisenhower.....	Vivid golden bronze spider.....	Nov. 18	Y-8A

PINK

9 WEEK	Bunbu.....	Large lavender pink spider.....	Nov. 1	Y-6C
	Mary Garden.....	Large light lavender pink.....	Nov. 1	Y-8A
10 WEEK	Rayonnante.....	Pink tube spider.....	Nov. 5	Y-8A
	Plum.....	Large silvery lavender duplex.....	Nov. 10	Y-8A

SYMBOL	50 ONLY	PRICE PER 100 CUTTINGS			
		100-250	300-450	500-950	1000 & UP
Y-5C	3.25	6.25	6.00	5.75	5.50
Y-5D	3.38	6.50	6.25	6.00	5.75
Y-6A	3.50	6.75	6.50	6.25	6.00
Y-6B	3.63	7.00	6.75	6.50	6.25
Y-6C	3.75	7.25	7.00	6.75	6.50
Y-6D	3.88	7.50	7.25	7.00	6.75
Y-7A	4.00	7.75	7.50	7.25	7.00
Y-7B	4.13	8.00	7.75	7.50	7.25
Y-7C	4.25	8.25	8.00	7.75	7.50
Y-7D	4.38	8.50	8.25	8.00	7.75
Y-8A	4.50	8.75	8.50	8.25	8.00

CHRYSANthemUM CUTTINGS PRICE LIST

Effective
January 1, 1961

The list price for each variety is indicated by a price symbol that appears with the variety name in the flowering program charts.



VARIETIES FOR YEAR-ROUND SPRAYS

WHITE

	Variety	Description	Natural Flowering Date	Price Code
7 WEEK PINCH JULY 10	Candleglow.....	White pompon.....	Oct. 1	Y-7B
	Horizon.....	Intermediate white pompon.....	Oct. 5	Y-6C
	Classic.....	Small white semi-formal pompon.....	Oct. 10	Y-8A
8 WEEK PINCH JULY 17	YGA Echo.....	Intermediate paper white formal pompon.....	Oct. 15	Y-8A
	Blizzard.....	Small white formal pompon.....	Oct. 15	Y-7B
	Pristine.....	Intermediate pure white pompon.....	Oct. 20	Y-7C
9 WEEK PINCH JULY 24	Silvertone.....	Intermediate white daisy.....	Oct. 25	Y-6C
	Silver Bow.....	Large formal pompon.....	Oct. 25	Y-7C
	YGA Cloudbank.....	Intermediate pure white anemone.....	Oct. 25	Y-8A
	Popcorn.....	Intermediate white pompon.....	Oct. 25	Y-7A
	White Popcorn.....	White sport of Popcorn.....	Oct. 25	Y-6A
	Keepsake.....	White pompon.....	Oct. 25	Y-6C
	White Keepsake.....	Intermediate white pompon.....	Oct. 25	Y-6B
	Pinocchio.....	Small pure white button pompon.....	Oct. 25	Y-5D
	YGA Alabaster.....	Intermediate pure white daisy.....	Oct. 25	Y-8A
	YGA Crystallite.....	Intermediate paper white formal pompon.....	Oct. 25	Y-7B
	Songster.....	Intermediate white pompon.....	Oct. 25	Y-8A
	Memento.....	Intermediate chalk white single.....	Oct. 30	Y-6B
	Halo.....	White daisy.....	Nov. 1	Y-7B
	Whitechip.....	White sport from Bluechip.....	Nov. 1	Y-8A
	Sea Gull.....	Intermediate ivory pompon.....	Nov. 1	Y-6D
	Alaska.....	Intermediate white anemone.....	Nov. 1	Y-6A
10 WEEK PINCH JULY 31	White Doty.....	Large white pompon.....	Nov. 1	Y-7C
	Thistledown.....	Medium to small clear white decorative pompon.....	Nov. 1	Y-7A
	YGA Sovereign.....	Intermediate white anemone.....	Nov. 5	Y-8A
	YGA Hurricane.....	Intermediate white decorative pompon.....	Nov. 5	Y-8A
	YGA Ping Pong.....	Small clear white formal pompon.....	Nov. 5	Y-7A
	Supertop.....	White decorative sport of Whitetop.....	Nov. 5	Y-6A
	Whitetop.....	Intermediate chalk white decorative.....	Nov. 5	Y-5C
	Tiptop.....	Tubular petaled form mutation from Whitetop.....	Nov. 5	Y-7A
	Feathertop.....	Deeply feathered sport of Whitetop.....	Nov. 5	Y-7A
	Supreme Whitetop.....	Large white decorative.....	Nov. 5	Y-7A
	Iceberg.....	Large white pompon.....	Nov. 5	Y-5C
	Encore.....	Intermediate white pompon.....	Nov. 5	Y-6D
	YGA Snow Crystal.....	Medium ivory white spider.....	Nov. 5	Y-6A
	Whiterion.....	White sport of Criterion.....	Nov. 8	Y-8A
	YGA Cloudburst (June '61).....	Large, white decorative pompon.....	Nov. 10	Y-8A
	YGA Milady (June '61).....	Large pure white anemone.....	Nov. 10	Y-8A
	White Pennant.....	Pure white sport from Pennant.....	Nov. 10	Y-8A
	YGA Chalk Cliff.....	Large chalk white decorative.....	Nov. 10	Y-7A
	YGA Dawn Star.....	Intermediate pure white pompon.....	Nov. 10	Y-7A
	YGA Coronado.....	Clear white daisy.....	Nov. 10	Y-8A
	Pacesetter.....	Intermediate pure white single.....	Nov. 10	Y-7D
	Illini Igloo.....	Intermediate ivory white pompon.....	Nov. 10	Y-6A

CLOUDBURST



CORONADO





VARIETIES FOR YEAR-ROUND SPRAYS

WHITE—Continued

	Variety	Description	Natural Flowering Date	Price Code
10 WEEK PINCH JULY 31	YGA Viscount.....	Large white semi-anemone.....	Nov. 10	Y-7B
	Shasta.....	Large white anemone.....	Nov. 10	Y-5C
	Little America.....	Intermediate pure white anemone.....	Nov. 10	Y-6A
	YGA Ensign.....	Intermediate white decorative.....	Nov. 10	Y-7A
	YGA Skyline (Feb. '61).....	Large ivory white formal pompon.....	Nov. 10	Y-8A
	YGA Stardust.....	Intermediate white formal pompon.....	Nov. 12	Y-6D
	Illini Snowdrift.....	Intermediate white feathered decorative.....	Nov. 12	Y-5D
11 WEEK PINCH AUGUST 7	White Taffeta.....	Pure white sport of Taffeta.....	Nov. 15	Y-6D
	White Norma.....	Large white anemone.....	Nov. 15	Y-7C
	YGA Bride (June '61).....	Small, white anemone with pure white cushion.....	Nov. 15	Y-8A
	YGA Lightning (June '61).....	Very large white pompon.....	Nov. 15	Y-8A
	Sculpture.....	Large ivory white daisy.....	Nov. 15	Y-7B
	White Norma.....	Large white anemone, yellow cushion.....	Nov. 15	Y-7C
	Illini Starflower.....	Large white semi-anemone spoon.....	Nov. 18	Y-8A
	YGA Ermine.....	Large white pompon.....	Nov. 20	Y-8A
	Greco's Carnation.....	Intermediate white pompon.....	Nov. 20	Y-8A
	YGA Jupiter.....	Large pure white decorative.....	Nov. 20	Y-7C
	Long Island Beauty.....	Large white anemone, yellow cushion.....	Nov. 20	Y-6B
	YGA Divinity (June '61).....	Pure white intermediate anemone.....	Nov. 20	Y-8A
	Highbrow.....	Ivory white decorative.....	Nov. 20	Y-6C
	YGA Ermine.....	Large white pom cream eye center.....	Nov. 20	Y-8A
	Nevada.....	Intermediate white anemone.....	Nov. 20	Y-8A
	Priscilla.....	Intermediate clear white pompon.....	Nov. 20	Y-7A
	YGA Surfside.....	Large clear white single.....	Nov. 23	Y-7A
	Paramount.....	Intermediate ivory white pompon.....	Nov. 23	Y-8A
	Belray.....	Large white pompon.....	Nov. 24	Y-7B
	Carrara.....	Intermediate pure white decorative.....	Nov. 24	Y-8A
12 WEEK PINCH AUGUST 14	White Princess.....	Pure white button.....	Nov. 25	Y-7B
	Silvercrest.....	Small white formal pompon.....	Nov. 25	Y-7D
	Illini Peace.....	White anemone for Thanksgiving.....	Nov. 25	Y-8A
	Champ.....	Large white anemone.....	Nov. 28	Y-8A
	White Valencia.....	Large white single.....	Nov. 28	Y-7A
	Cordova.....	Intermediate white pompon.....	Nov. 30	Y-7B
	Fortune.....	Formal white pompon.....	Dec. 1	Y-8A
	Illini Glacier.....	Medium clear white anemone.....	Dec. 1	Y-8A
13 WEEK PINCH AUGUST 21	Icecap.....	Intermediate chalk white pompon.....	Dec. 5	Y-5C
	Cameo.....	Intermediate ivory decorative.....	Dec. 5	Y-7B
	White Enchantress.....	Large white disspray anemone.....	Dec. 5	Y-7C
	Acclaim.....	Large ivory white formal type pompon.....	Dec. 5	Y-6C
	Spangles.....	Small white pompon.....	Dec. 5	Y-7B
	YGA Snowstorm.....	Medium white decorative pompon.....	Dec. 5	Y-7C
	Illini Alba.....	Intermediate chalk white daisy.....	Dec. 5	Y-8A
	YGA Northwind.....	Medium to large pure white single.....	Dec. 8	Y-8A
	White Snowdrop.....	Pure white sport of Snowdrop.....	Dec. 8	Y-7B
	Iceflo (June '61).....	Intermediate white pompon.....	Dec. 10	Y-8A
	Illini Starlet.....	Intermediate white anemone.....	Dec. 10	Y-7D
	Yukon.....	Intermediate chalk white single.....	Dec. 10	Y-7C
	White Minstrel.....	White sport of Minstrel.....	Dec. 13	Y-8A

BRIDE



ICEFLO





VARIETIES FOR YEAR-ROUND SPRAYS

WHITE—Continued

	Variety	Description	Natural Flowering Date	Price Code
13 WEEK				
PINCH	Satellite.....	Intermediate cream white pompon.....	Dec. 13	Y-7B
AUGUST 21	Dolomite.....	Intermediate clear white pompon.....	Dec. 13	Y-7C
	Snowcrest.....	Small white button pompon.....	Dec. 13	Y-7B
14 WEEK				
PINCH	Trenton.....	Intermediate white pompon.....	Dec. 15	Y-6D
AUGUST 28	Silversmith.....	Intermediate pure white decorative.....	Dec. 15	Y-6B
	Snowcap.....	Large white formal pompon.....	Dec. 15	Y-6C
	Garza.....	Intermediate white anemone.....	Dec. 15	Y-6D
	Elegance.....	Intermediate white decorative.....	Dec. 20	Y-6D
	Wedding Bells.....	Small to medium white formal pompon.....	Dec. 20	Y-7A
15 WEEK				
PINCH	Revelation.....	Intermediate white decorative.....	Dec. 25	Y-6A
SEPT. 4	Snow.....	Intermediate white pompon.....	Dec. 25	Y-6C
	Talmeda.....	Intermediate white pompon.....	Jan. 5	Y-7A
	Illini Cascade.....	Large clear white decorative.....	Jan. 5	Y-6C
	Illini Snowbound.....	Large white informal decorative.....	Jan. 5	Y-7A

YELLOW

7 WEEK				
PINCH	Polaris.....	Early golden buff daisy.....	Oct. 5	Y-7D
JULY 10	Treasure.....	Small deep yellow pompon.....	Oct. 10	Y-7D
	Bright Forecast.....	Very formal yellow pompon.....	Oct. 10	Y-7C
8 WEEK				
PINCH	Yellow Calumet.....	Lemon yellow sport of Calumet.....	Oct. 15	Y-8A
JULY 17	YGA Topflight.....	Medium to small bright yellow anemone.....	Oct. 20	Y-7B
	Yellow Bow (Feb. '61).....	Yellow sport of Silver Bow.....	Oct. 25	Y-7B
9 WEEK				
PINCH	Yellow Silvertone.....	Intermediate deep lemon yellow daisy.....	Oct. 25	Y-8A
JULY 24	Yellow Keepsake.....	Rich yellow sport of Keepsake.....	Oct. 25	Y-8A
	Golden Herald.....	Large yellow decorative.....	Oct. 25	Y-6C
	Gold Coast.....	Intermediate deep lemon formal pompon.....	Oct. 25	Y-5D
	Yellow Dot.....	Small two tone pompon.....	Oct. 25	Y-7D
	Happiness.....	Large golden yellow single.....	Oct. 28	Y-6B
	Sunup.....	Small deep yellow pompon.....	Oct. 28	Y-7D
	YGA Sunbeam.....	Intermediate to large golden yellow daisy.....	Oct. 30	Y-8A
	Sauterne.....	Intermediate intense yellow single.....	Oct. 30	Y-7B
	YGA Flair.....	Intense yellow daisy.....	Nov. 1	Y-8A
	Schn. Yellow Daisy.....	Intermediate yellow single.....	Nov. 1	Y-8A
	Dandy.....	Intermediate yellow pompon.....	Nov. 1	Y-7B
	No. 2 Dandy.....	Golden yellow pompon.....	Nov. 1	Y-7B
	Statesman.....	Small intense yellow pompon.....	Nov. 1	Y-6C
	YGA Brilliancy.....	Intermediate Aztec yellow single.....	Nov. 1	Y-7B
	Yellowchip.....	Bright lemon yellow sport of Bluechip.....	Nov. 1	Y-6C
	Starbright.....	Large deep lemon single.....	Nov. 1	Y-8A
	Sunray.....	Small yellow anemone.....	Nov. 3	Y-7B

SUNBEAM



HIGHBALL



VARIETIES FOR YEAR-ROUND SPRAYS

YELLOW—Continued

10 WEEK
PINCH
JULY 31

Variety	Description	Natural Flowering Date	Price Code
YGA Imperial (June '61)	Deep golden yellow intermediate pompon	Nov. 5	Y-8A
Barcarole	Intermediate lemon pompon	Nov. 5	Y-7D
Goldtop	Intermediate deep lemon yellow pompon	Nov. 5	Y-7C
Yellowtop	Lemon yellow sport from Whitetop	Nov. 5	Y-7A
Yellow Tiptop	Deep lemon sport from Tiptop	Nov. 5	Y-8A
Aztec	Intermediate deep yellow daisy	Nov. 5	Y-7D
Mary Hall	Intermediate deep lemon pompon	Nov. 5	Y-7B
Crescendo	Large yellow pompon	Nov. 5	Y-7B
YGA Golden Bantam	Small deep golden yellow pompon	Nov. 5	Y-7D
Yellow Beauregard	Intermediate clear golden yellow pompon	Nov. 5	Y-6A
Yellow Iceberg	Clear lemon yellow sport from Iceberg	Nov. 5	Y-5C
No. 2 Yellow Iceberg	Deep yellow sport from Yellow Iceberg	Nov. 5	Y-6A
Goldberg	Large golden yellow pompon	Nov. 5	Y-7A
YGA Sunfire	Medium to large dark yellow single	Nov. 5	Y-8A
YGA Yellow Crystal	Medium lemon yellow spider	Nov. 5	Y-7A
YGA Golden Crystal	Deep golden yellow sport from Snow Crystal	Nov. 5	Y-8A
Luxury	Large clear yellow decorative	Nov. 8	Y-6C
Yellow Shasta	Large light lemon yellow anemone	Nov. 10	Y-5C
Golden Shasta	Large deep yellow anemone	Nov. 10	Y-7C
Jealousy	Small intense yellow pompon	Nov. 10	Y-7B
Yellow Igloo	Intermediate deep lemon yellow pompon	Nov. 10	Y-6B
Heydey	Intermediate bright yellow pompon	Nov. 10	Y-6B
Yellow Pacesetter	Lemon yellow single	Nov. 10	Y-8A
YGA Golden Stardust	Golden yellow sport from Stardust	Nov. 12	Y-7D
YGA Yellow Stardust	Bright lemon yellow sport from Stardust	Nov. 12	Y-8A
Yellow Ill. Snowdrift	Small yellow novelty decorative	Nov. 12	Y-7B
YGA Fanfare	Intermediate golden yellow anemone	Nov. 14	Y-8A

11 WEEK
PINCH
AUGUST 7

YGA Highball (June '61)	Intermediate deep yellow pompon	Nov. 15	Y-8A
YGA Old Gold (June '61)	Deep golden yellow intermediate decorative	Nov. 15	Y-8A
YGA Etude	Large rich yellow semi-formal pompon	Nov. 15	Y-6D
Souvenir	Intermediate dark yellow daisy	Nov. 15	Y-7C
Yellow Taffeta	Intermediate lemon yellow sport from Taffeta	Nov. 15	Y-8A
Yellow Sculpture	Lemon yellow daisy sport from Sculpture	Nov. 15	Y-8A
Golden Chord	Intermediate intense golden yellow pompon	Nov. 15	Y-6C
Forty-Niner	Intermediate brilliant golden yellow pompon	Nov. 15	Y-6D
Esquire	Intermediate deep yellow decorative	Nov. 15	Y-7C
Gold Ball	Intermediate golden yellow pompon	Nov. 15	Y-7B
YGA Shane	Intermediate to large golden yellow anemone	Nov. 15	Y-7D
Illini Goldrift	Intermediate bright golden yellow feathered decorative	Nov. 18	Y-8A
Yellow L. I. Beauty	Large lemon anemone	Nov. 20	Y-7A
Yellow Highbrow	Intermediate golden yellow pompon	Nov. 20	Y-7A
Lollipop	Lemon yellow formal pompon	Nov. 20	Y-6C
Pippin	Intermediate yellow pompon	Nov. 20	Y-6D
Klondike	Orange yellow pompon	Nov. 20	Y-7D
Illini Sunspot	Large yellow formal pompon	Nov. 20	Y-8A
Sultan	Large golden yellow to amber formal decorative	Nov. 23	Y-8A
Golden Paramount	Intermediate intense golden yellow formal pompon	Nov. 23	Y-8A
Yellow Paramount	Deep yellow sport of Paramount	Nov. 23	Y-8A

YELLOW STARDUST



IMPERIAL



VARIETIES FOR YEAR-ROUND SPRAYS

YELLOW—Continued

	Variety	Description	Natural Flowering Date	Price Code
12 WEEK PINCH AUGUST 14	Goldenrod.....	Solid light yellow pompon.....	Nov. 25	Y-7D
	Goldsmith.....	Large golden yellow decorative.....	Nov. 25	Y-7B
	Highlander.....	Intermediate intense yellow decorative.....	Nov. 25	Y-7B
	Sunnyside.....	Intermediate deep lemon pompon.....	Nov. 25	Y-6A
	Illini Wampum.....	Bright yellow anemone, greenish yellow cushion.....	Nov. 25	Y-6D
	Yellow Valencia.....	Large yellow single.....	Nov. 28	Y-7A
	Yellow Fortune.....	Deep yellow sport of Fortune.....	Dec. 1	Y-8A
	Golden Fortune.....	Golden Yellow sport of Yellow Fortune.....	Dec. 1	Y-8A
	Omega.....	Intermediate deep lemon pompon.....	Dec. 1	Y-6D
	Yellow Galaxy.....	Deep lemon yellow sport of Galaxy.....	Dec. 1	Y-6C
13 WEEK PINCH AUGUST 21	YGA Kingpin (June '61).....	Intermediate deep yellow, formal pompon.....	Dec. 5	Y-8A
	Coronation.....	Intermediate to large intense yellow decorative.....	Dec. 5	Y-6D
	Yellow Acclaim.....	Yellow sport from Acclaim.....	Dec. 5	Y-7B
	Golden Acclaim.....	Intermediate golden yellow selection from Acclaim.....	Dec. 5	Y-6D
	Yellow Enchantress.....	Large bright golden buff disspray anemone.....	Dec. 5	Y-8A
	Cinderella.....	Intermediate golden yellow single.....	Dec. 5	Y-8A
	YGA Spungold.....	Intermediate deep lemon yellow single.....	Dec. 8	Y-8A
	Dark Yellow Satellite.....	Dark yellow sport from Yellow Satellite.....	Dec. 10	Y-7D
	Corsair.....	Large yellow pompon.....	Dec. 12	Y-6B
	Yellow Snowcrest.....	Clear yellow Snowcrest sport, bright green eye.....	Dec. 13	Y-7D
14 WEEK PINCH AUGUST 29	Illini Brighteyes.....	Intermediate lemon yellow anemone. Dark yellow cushion..	Dec. 15	Y-7D
	Yellow Garza.....	Intermediate lemon yellow anemone.....	Dec. 15	Y-7A
	Shamrock.....	Large yellow decorative.....	Dec. 15	Y-7B
	December Gold.....	Large deep golden yellow pompon.....	Dec. 15	Y-8A
	Golden Elegance.....	Intermediate lemon yellow decorative.....	Dec. 20	Y-7B
	Sun Valley.....	Intermediate to large intense yellow pompon.....	Dec. 20	Y-7D
	Vibrant.....	Intermediate deep lemon decorative.....	Dec. 20	Y-6C
	Sunrise.....	Yellow pompon, as a late Gold Coast.....	Dec. 20	Y-7A
15 WEEK PINCH SEPT. 4	Siren.....	Deep yellow decorative.....	Dec. 25	Y-6B
	Yuleflame.....	Large deep lemon decorative.....	Dec. 25	Y-7D
	Yellow Snow.....	Intermediate yellow pompon.....	Dec. 25	Y-6C
	Golden Snowbound.....	Intermediate golden yellow decorative.....	Jan. 5	Y-7A
	Illini Yel. Snowbound.....	Yellow sport of Snowbound.....	Jan. 5	Y-7A
	Yellow Illini Cascade.....	(June '61) Large, lemon yellow sport from Illini Cascade.....	Jan. 5	Y-8A

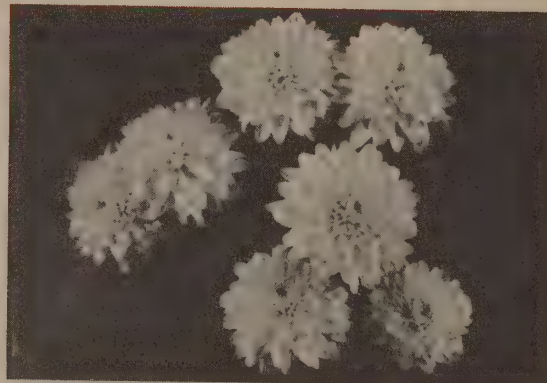
BRONZE & RED

7 WEEK PINCH JULY 10	Nobility.....	Large maroon red decorative.....	Oct. 5	Y-7B
	Huntsman.....	Red bronze decorative.....	Oct. 5	Y-6D
	Carmin Queen.....	Carmin red pompon.....	Oct. 10	Y-8A
	Carnival.....	Large glowing orange pompon.....	Oct. 10	Y-8A
	YGA Remember Me.....	Large red spoon, bronze tubes.....	Oct. 10	Y-7B

KINGPIN



COPPERCHIP



VARIETIES FOR YEAR-ROUND SPRAYS

BRONZE & RED—Continued

	Variety	Description	Natural Flowering Date	Price Code
8 WEEK PINCH JULY 17	Calumet.....	Apricot bronze pompon.....	Oct. 15	Y-7C
	Dark Calumet.....	Dark bronze sport of Calumet.....	Oct. 15	Y-7D
	Rajah.....	Large crimson red daisy.....	Oct. 15	Y-8A
9 WEEK PINCH JULY 24	Panorama.....	Large vivid bronze decorative.....	Oct. 25	Y-8A
	Resolute.....	Large reddish bronze pompon.....	Oct. 25	Y-8A
	Gaiety.....	Intermediate Talisman bronze single.....	Oct. 25	Y-7A
	Flame Gaiety.....	Intermediate bittersweet red daisy.....	Oct. 25	Y-7D
	Firebird.....	Intermediate red bronze decorative.....	Oct. 25	Y-8A
	Bronze Dot.....	Small two tone bronze pompon.....	Oct. 25	Y-6C
	Sally.....	Small intense bronze pompon.....	Oct. 25	Y-7B
	Buckskin.....	Tawny bronze daisy.....	Oct. 25	Y-6B
	Red Reward.....	Intermediate brick to crimson red daisy.....	Oct. 25	Y-7D
	Sybil.....	Intermediate golden apricot daisy.....	Oct. 30	Y-7B
	Bronzechip.....	Intermediate lively orange bronze decorative.....	Nov. 1	Y-6A
9 WEEK PINCH JULY 24	Copperchip.....	Bright amber bronze sport from Bronzechip.....	Nov. 1	Y-7D
	YGA Tanfastic.....	Intermediate deep bronze pompon.....	Nov. 1	Y-7C
	Firefly.....	Orange red pompon.....	Nov. 1	Y-8A
	Buccaneer.....	Rich orange bronze daisy.....	Nov. 1	Y-6D
	Red Daisy.....	Intermediate red single.....	Nov. 1	Y-7D
10 WEEK PINCH JULY 31	YGA Tuneful.....	Intermediate intense orange bronze daisy.....	Nov. 5	Y-8A
	Jetfire.....	Intermediate flaming red decorative.....	Nov. 5	Y-6D
	Red Jetfire.....	Intense red sport from Jetfire.....	Nov. 5	Y-7C
	Nectarine.....	Intermediate apricot orange decorative.....	Nov. 5	Y-8A
	Bronze Delight.....	Intermediate brick-red bronze daisy.....	Nov. 5	Y-8A
	Orange Beauregard.....	Light orange sport from Beauregard.....	Nov. 5	Y-7A
	Beauregard.....	Reddish orange pompon.....	Nov. 5	Y-6A
	Dark Beauregard.....	Intermediate mahogany bronze pompon.....	Nov. 5	Y-6A
	Dillon Beauregard.....	Intermediate intense reddish bronze pompon.....	Nov. 5	Y-6B
	Rubicon.....	Intermediate red bronze decorative.....	Nov. 5	Y-6C
	Bittersweet.....	Intermediate red bronze single.....	Nov. 5	Y-7B
	Samovar.....	Intermediate intense rust red pompon.....	Nov. 10	Y-7A
	YGA Daybreak.....	Orange anemone.....	Nov. 10	Y-8A
	YGA Wizard.....	Intermediate orange bronze pompon.....	Nov. 10	Y-8A
	Climax.....	Intermediate intense orange pompon.....	Nov. 10	Y-6D
	Red Climax.....	Reddish bronze sport from Climax.....	Nov. 10	Y-8A
	Copperhead.....	Large coppery bronze decorative.....	Nov. 10	Y-7A
	YGA Giltglow.....	Intermediate bi-colored single.....	Nov. 10	Y-7A
	Red Humdinger.....	Burgundy red sport from Humdinger.....	Nov. 11	Y-7B
	No. 2 Red Humdinger.....	Color intensification on Red Humdinger.....	Nov. 11	Y-7B
	Bronze Masterpiece.....	Intermediate bronze pompon.....	Nov. 12	Y-7B
	Paragon.....	Large rust red pompon.....	Nov. 12	Y-7C
	Amberhue.....	Intermediate orange bronze daisy.....	Nov. 14	Y-8A

PANORAMA



TUNEFUL



VARIETIES FOR YEAR-ROUND SPRAYS

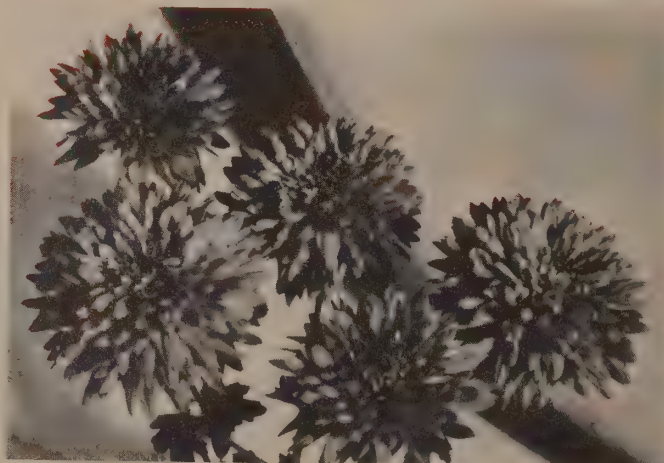
BRONZE & RED—Continued

	Variety	Description	Natural Flowering Date	Price Code
11 WEEK PINCH AUGUST 7	Copper Jubilation.....	(June '61) True copper bronze sport from Jubilation.....	Nov. 15	Y-8A
	Dark Bronze Ranger.....	(June '61) Red bronze sport from Ranger.....	Nov. 15	Y-8A
	YGA Bronze Etude.....	(June '61) Light bronze sport from Etude.....	Nov. 15	Y-8A
	Beauregard Supreme.....	Sport selection from Beauregard.....	Nov. 15	Y-6C
	Bronze Jubilation.....	Large rosewood bronze sport of Jubilation.....	Nov. 15	Y-8A
	Thelma.....	Brilliant orange scarlet pompon.....	Nov. 15	Y-6B
	Ranger.....	Intermediate true orange pompon.....	Nov. 15	Y-8A
	Tan Vedova.....	Light bronze sport of Vedova.....	Nov. 15	Y-8A
	Valentine.....	Large red decorative.....	Nov. 20	Y-7A
	YGA Rebel (June '61).....	Intense red daisy.....	Nov. 20	Y-8A
	Legal Tender.....	Intermediate bronze decorative.....	Nov. 20	Y-7C
	YGA Cardinal.....	Intermediate intense crimson red pompon.....	Nov. 20	Y-8A
	Rusticon.....	Intermediate rust red pompon.....	Nov. 20	Y-7A
	Ambercon.....	Intermediate warm amber bronze pompon.....	Nov. 20	Y-8A
	Olnura.....	Large apricot buff anemone.....	Nov. 22	Y-8A
	Festival.....	Intermediate red single.....	Nov. 23	Y-8A
	Rubaiyat.....	Intermediate velvety red formal pompon.....	Nov. 23	Y-6B
	Red Rolinda.....	Intermediate brick red anemone.....	Nov. 23	Y-7A
12 WEEK PINCH AUGUST 14	YGA Dragon (June '61).....	Bright red intermediate pompon.....	Nov. 25	Y-8A
	Illini Redwood.....	Intermediate red pompon.....	Nov. 25	Y-7B
	Bronze Goldsmith.....	Large amber bronze decorative.....	Nov. 25	Y-7C
	Indian Head.....	Intense red bronze single.....	Nov. 28	Y-8A
	Apricot Valencia.....	Large apricot bronze single.....	Nov. 28	Y-7B
	Crimson Valencia.....	Large maroon red single.....	Nov. 28	Y-8A
	Galaxy.....	Intermediate bright orange single.....	Dec. 1	Y-6D
	Red Galaxy.....	Intermediate scarlet red single.....	Dec. 1	Y-7B
	Holiday.....	Intermediate red single.....	Dec. 1	Y-8A
	Crackerjack.....	Intermediate warm reddish bronze daisy.....	Dec. 1	Y-7A
13 WEEK PINCH AUGUST 21	Debonair.....	Large red pompon.....	Dec. 5	Y-7C
	Harlequin.....	Intermediate crimson red decorative.....	Dec. 10	Y-7C
	Christmas Star.....	Intermediate red single.....	Dec. 12	Y-7A
	Bronze Minstrel.....	Intermediate coral red pompon.....	Dec. 13	Y-8A
	Dk. Br. Minstrel.....	Reddish bronze sport of Bronze Minstrel.....	Dec. 13	Y-7C
	Red Minstrel.....	Crimson red sport of Bronze Minstrel.....	Dec. 13	Y-8A
	Flame Minstrel.....	Intermediate reddish bronze pompon.....	Dec. 13	Y-8A
14 WEEK PINCH AUGUST 28	Bronze Alvoda.....	Large bright amber bronze decorative.....	Dec. 15	Y-8A
	Christmas Greeting.....	Large red decorative.....	Dec. 15	Y-6D
	Illini Homespun.....	Intermediate bright tomato red single.....	Dec. 20	Y-8A
	Merrymaker.....	Intermediate red single.....	Dec. 20	Y-7A
	Poinsettia.....	Large scarlet red daisy.....	Dec. 20	Y-6D
	YGA Beau Brummell.....	(June '61) Brilliant golden bronze pompon.....	Dec. 20	Y-8A

REBEL



DRAGON



VARIETIES FOR YEAR-ROUND SPRAYS

PINK

	Variety	Description	Natural Flowering Date	Price Code
8 WEEK PINCH JULY 17	Enterprise.....	Intermediate deep pink pompon.....	Oct. 15	Y-7D
	Elizabeth Hood.....	Intermediate light orchid pink pompon.....	Oct. 15	Y-8A
	Accolade.....	Intermediate carnation pink decorative.....	Oct. 15	Y-7C
	Jewell.....	Small lavender pink formal pompon.....	Oct. 15	Y-7D
	Mirth.....	Intermediate pink single.....	Oct. 20	Y-8A
	Carolyn Yosick.....	Intermediate lavender pink pompon.....	Oct. 20	Y-7D
9 WEEK PINCH JULY 24	Pinkette.....	Small dark pompon.....	Oct. 25	Y-7A
	Reward.....	Productive deep pink single.....	Oct. 25	Y-6B
	Pink Dot.....	Small pink pompon.....	Oct. 25	Y-7A
	Pearl Chip (June '61).....	Luminous shell pink or appleblossom sport.....	Nov. 1	Y-8A
	Bluechip.....	Intermediate luminous pink decorative.....	Nov. 1	Y-5C
	Pinkchip.....	Intermediate light pink decorative.....	Nov. 1	Y-7A
	Peach Chip.....	Intermediate bright peach pink decorative.....	Nov. 1	Y-5C
	Darkchip.....	Intermediate dark lavender pink decorative.....	Nov. 1	Y-7C
	Cherrychip.....	Intermediate rose pink decorative.....	Nov. 1	Y-7D
	YGA Handsome.....	Intermediate lavender pink decorative pompon.....	Nov. 1	Y-8A
	Lillian Doty.....	Large light pink pompon.....	Nov. 1	Y-7A
10 WEEK PINCH JULY 31	Tempo.....	Intermediate deep pink decorative.....	Nov. 3	Y-8A
	Parisienne.....	Intermediate shell pink decorative.....	Nov. 5	Y-6C
	Delight.....	Intermediate pink duplex daisy.....	Nov. 5	Y-6B
	YGA Overture.....	Large luminous pink pompon.....	Nov. 5	Y-8A
	YGA Bluebird.....	Large pink decorative disbud.....	Nov. 5	Y-8A
	Portrait.....	Large lavender pink pompon.....	Nov. 8	Y-6A
	Pink Portrait.....	Light pink sport from Portrait.....	Nov. 8	Y-6C
	Profile.....	Large lively deep pink pompon.....	Nov. 8	Y-8A
	Criterion.....	Large pink decorative.....	Nov. 8	Y-6C
	Bonnie.....	Intermediate pink pompon.....	Nov. 10	Y-8A
	Pennant.....	Intermediate deep pink pompon.....	Nov. 10	Y-6B
	Pandora.....	Large luminous pink decorative.....	Nov. 10	Y-8A
	Scintillation.....	Intermediate deep pink pompon.....	Nov. 10	Y-8A
	Linda Lou.....	Intermediate light lavender pink anemone.....	Nov. 10	Y-7C
	Humdinger.....	Large violet purple formal pompon.....	Nov. 10	Y-6C
	YGA Excello.....	Intermediate pink daisy.....	Nov. 10	Y-8A
	Masterpiece.....	Intermediate lavender pink pompon.....	Nov. 12	Y-7C
	Rose Masterpiece.....	Intermediate light lavender pink pompon.....	Nov. 12	Y-7D
	YGA Cheerful.....	Intermediate lavender pink pompon.....	Nov. 12	Y-6C
11 WEEK PINCH AUGUST 7	Taffeta.....	Two tone pink pompon.....	Nov. 15	Y-6D
	Jubilation.....	Large Masterpiece pink pompon.....	Nov. 15	Y-7C
	Pink Jubilation (June '61).....	Smooth, glistening light pink sport.....	Nov. 15	Y-8A
	Rose Jubilation.....	Bright rose pink sport of Jubilation.....	Nov. 15	Y-8A
	Illini Springtime.....	Intermediate pink single.....	Nov. 15	Y-7D
	Vedova.....	Extra large Valencia sized anemone.....	Nov. 15	Y-7A
	YGA Staccato.....	Intermediate lavender pink formal pompon.....	Nov. 20	Y-7D
	Grand Slam.....	Brilliant silvery pink daisy.....	Nov. 20	Y-7D
	YGA Delmarvel (June '61).....	Intermediate pink pompon.....	Nov. 20	Y-8A
	YGA Signet (June '61).....	Intermediate pink anemone.....	Nov. 20	Y-8A
	Almega.....	Large silvery pink pompon.....	Nov. 20	Y-7B
	Venoya.....	Extra large lavender pink anemone.....	Nov. 22	Y-7A

SIGNET

EXCELLO



VARIETIES FOR YEAR-ROUND SPRAYS

PINK—Continued

	Variety	Description	Natural Flowering Date	Price Code
11 WEEK PINCH AUGUST 7	Minuet.....	Small true pink pompon.....	Nov. 23	Y-7C
	YGA Blue Skies.....	Large Portrait pink pompon.....	Nov. 23	Y-8A
	Illini Formal.....	Intermediate lavender pink pompon.....	Nov. 23	Y-8A
	YGA Celebrity.....	Intermediate shell pink decorative.....	Nov. 23	Y-8A
12 WEEK PINCH AUGUST 14	YGA Hi-Fi.....	Intermediate Portrait pink pompon.....	Nov. 25	Y-8A
	YGA Legend.....	Intermediate true lavender pink formal pompon.....	Nov. 25	Y-8A
	Delmar.....	Intermediate light lavender pink pompon.....	Nov. 25	Y-6B
	Beautiful Lady.....	Large pink anemone.....	Nov. 25	Y-6D
	YGA Splendor.....	Large luminous shell pink decorative pompon.....	Nov. 25	Y-8A
	YGA Royal.....	Medium to large deep pink decorative.....	Nov. 25	Y-8A
	Valencia.....	Large light lavender pink single.....	Nov. 28	Y-7A
	Dark Valencia.....	Large lavender pink single.....	Nov. 28	Y-7B
	YGA Prom.....	Intermediate intensified Delmar pink pompon.....	Dec. 1	Y-8A
13 WEEK PINCH AUGUST 21	Eminence.....	Intermediate bright lavender pink daisy.....	Dec. 5	Y-8A
	Enchantress.....	Large lavender pink disspray anemone.....	Dec. 5	Y-7A
	Pink Snowdrop.....	Light pink sport from Snowdrop.....	Dec. 8	Y-7D
	Debutante.....	Intermediate pink single.....	Dec. 10	Y-6D
	Minstrel.....	Intermediate lavender pink pompon.....	Dec. 13	Y-7A
	Dk. Pk. Minstrel.....	Clear deep mulberry shade of Minstrel.....	Dec. 13	Y-7C
	Imp. Pink Minstrel.....	Intermediate pink formal pompon.....	Dec. 13	Y-7C
14 WEEK PINCH AUGUST 28	Alvoda.....	Large smooth Portrait pink decorative.....	Dec. 15	Y-6C
	Dark Alvoda.....	Large mulberry pink decorative.....	Dec. 15	Y-8A
	Riviera.....	Intermediate luminous pink decorative.....	Dec. 15	Y-7C
	Medallion.....	Intermediate lavender rose pompon.....	Dec. 20	Y-7B
	Lynda McLane.....	Late pink pompon.....	Dec. 25	Y-6D

CARDINAL



OVERTURE



ALABASTER



SPLENDOR





EARLY VARIETIES FOR SPRING POTS AND GARDENS

WHITE

	Variety	Description	Natural Flowering Date	Price Code
7 WEEK	White Cushion	White duplex pompon	Sept. 25	Y-7A
	Ostosa	Intermediate paper white pompon	Sept. 25	Y-7C
	Larry	Intermediate paper white pompon	Oct. 1	Y-7D
	Chris. Columbus	Intermediate cream decorative	Oct. 1	Y-8A
	Jessamine Williams	White spoon decorative	Oct. 1	Y-8A
	YGA Diamond	Intermediate white pompon	Oct. 5	Y-8A
	Silverplate	White decorative	Oct. 12	Y-8A
8 WEEK	Joan-Ette	Large ivory white quill type spider	Oct. 15	Y-8A
	Gloria	Intermediate ivory white pompon	Oct. 15	Y-8A
	Gardenia	Large white decorative	Oct. 15	Y-8A

YELLOW

7 WEEK	Golden Cushion	Golden yellow pompon	Sept. 25	Y-7B
	Yellow Cushion	Light yellow pompon	Sept. 25	Y-7D
	Yel. Chris. Columbus	Intermediate lemon yellow decorative	Oct. 1	Y-8A
	YGA Gay Blade	Bright Yellow miniature spider	Oct. 1	Y-8A
	Astoria	Yellow Pompon	Oct. 5	Y-8A
	Charles Nye	Yellow Pompon	Oct. 5	Y-7C
	Yellow Spoon	Yellow spoon single	Oct. 5	Y-8A
	Kings Ransom	Intermediate golden yellow decorative	Oct. 10	Y-8A
	Ethel Waters	Large lemon yellow pompon	Oct. 10	Y-8A
8 WEEK	Peking	Intermediate primrose yellow decorative	Oct. 15	Y-8A

BRONZE & RED

7 WEEK	Minnehaha	Small coral bronze pompon	Sept. 15	Y-8A
	Mesabi	Small rust bronze pompon	Sept. 20	Y-8A
	Commander Cushion	Red duplex pompon	Sept. 25	Y-7D
	Champion Cushion	Deep bronze pompon	Sept. 25	Y-7D
	Mahogany Cushion	Jasper red pompon	Sept. 25	Y-7D
	Lipstick	Small burgundy red cushion pompon	Oct. 5	Y-8A
	Remembrance	Carmine red pompon	Oct. 5	Y-8A
	Red Mischief	Deep red daisy	Oct. 10	Y-8A
	Dolli-Ette	Intermediate golden bronze spoon	Oct. 10	Y-8A
	Toronto	Intermediate orange bronze decorative	Oct. 10	Y-8A
8 WEEK	Cheyenne	Large bright red decorative	Oct. 15	Y-8A
	Radiance	Intermediate red decorative	Oct. 15	Y-8A
	Caprice	Large intense apricot bronze decorative	Oct. 15	Y-8A
	YGA Zest	Red spoon	Oct. 15	Y-8A
	Majestic	Small bronze incurved disbud	Oct. 20	Y-8A

DIAMOND



GAY BLADE



EARLY VARIETIES FOR SPRING POTS AND GARDENS

PINK

	Variety	Description	Natural Flowering Date	Price Code
7 WEEK	Minnpink.....	Small coral pink pompon.....	Sept. 25	Y-8A
	Purple Waters.....	Intermediate deep purple pompon.....	Sept. 25	Y-8A
	Major Cushion.....	Pink duplex pompon.....	Sept. 25	Y-7D
	Spellbound.....	Lavender decorative.....	Oct. 1	Y-8A
	Cecelia.....	Intermediate deep pink decorative.....	Oct. 1	Y-8A
	Ann Ladygo.....	Small bright pink anemone.....	Oct. 5	Y-7B
	Mischief.....	Dark purple daisy.....	Oct. 10	Y-8A
	Joybringer.....	Salmon rose pompon.....	Oct. 10	Y-8A
	YGA Raspberry Ice.....	Small raspberry pink pompon.....	Oct. 10	Y-8A
	Alert.....	Intermediate purple decorative.....	Oct. 14	Y-8A
	No. 2 Fuchsia Fairy.....	Small deep pink decorative.....	Oct. 14	Y-8A
	Fuchsia Fairy.....	Pink decorative.....	Oct. 14	Y-8A
8 WEEK	Royal-Ette.....	Intermediate bright lavender pink spoon.....	Oct. 15	Y-8A

MESABI



MINNEHAHA



PURPLE WATERS



JOAN-ETTE





VARIETIES FOR YEAR-ROUND POTS

WHITE

	Variety	Description	Natural Flowering Date	Price Code
8 WEEK	Joan-Ette.....	Large ivory white quill type spider.....	Oct. 15	Y-8A
	Gardenia.....	Large white decorative.....	Oct. 15	Y-8A
9 WEEK	Monty.....	Intermediate white decorative.....	Oct. 25	Y-7B
	YGA Quicksilver.....	Large pure white decorative.....	Oct. 25	Y-6A
	Granite State.....	White disbud pompon.....	Oct. 25	Y-7D
	YGA Snowclad.....	Portrait size paper-white decorative.....	Nov. 1	Y-6C
	Queen's Lace.....	White spider.....	Nov. 1	Y-6C
	Wilson's White.....	Large paper-white decorative.....	Nov. 1	Y-6D
	Patterson's White.....	Large white decorative.....	Nov. 1	Y-8A
	Poitevine Supreme.....	Intermediate white decorative.....	Nov. 1	Y-8A
	Malou.....	Intermediate incurve, chalk white.....	Nov. 1	Y-8A
	Luna.....	Small light cream incurve.....	Nov. 1	Y-7D
10 WEEK	Imp. Ind. White.....	Large white standard.....	Nov. 5	Y-5C
	No. 3 Ind. White.....	Large white incurve.....	Nov. 5	Y-5C
	White Prince.....	Intermediate pure white standard.....	Nov. 5	Y-8A
	YGA Snow Crystal.....	Medium ivory white spider.....	Nov. 5	Y-6A
	Oregon.....	Large white semi-incurve.....	Nov. 5	Y-5D
	Susan Leighton.....	Large ivory white spider.....	Nov. 6	Y-8A
	Whiterion.....	White sport of Criterion.....	Nov. 8	Y-8A
	YGA Chalk Cliff.....	Large chalk white decorative.....	Nov. 10	Y-7A
	Pacesetter.....	Intermediate pure white single.....	Nov. 10	Y-7D
	YGA Ensign.....	Intermediate decorative disbud.....	Nov. 10	Y-8A
	YGA White Deluxe.....	(June '61) Clear white sport from Pink Deluxe.....	Nov. 10	Y-8A
	YGA Starburst (June '61).....	Pure white feathered decorative.....	Nov. 10	Y-8A
	YGA Ice Follies.....	Large chalk white decorative.....	Nov. 10	Y-6B
	Little America.....	Intermediate pure white anemone.....	Nov. 10	Y-6A

YELLOW

8 WEEK	Peking.....	Intermediate primrose yellow decorative.....	Oct. 15	Y-8A
	Blazing Gold.....	Intermediate golden yellow semi-incurve.....	Oct. 23	Y-6D
9 WEEK	YGA Sundial.....	Intermediate feathered spider disbud.....	Oct. 25	Y-6D
	Georgia.....	Intermediate dark yellow incurve.....	Oct. 25	Y-8A
	Ohio State.....	Large intense yellow decorative.....	Oct. 25	Y-8A
	Mrs. Wolfe.....	Large lemon yellow incurve.....	Nov. 1	Y-8A
	Yellow Lace.....	Lemon yellow spider.....	Nov. 1	Y-7B
	Gold Lace.....	Golden yellow spider.....	Nov. 1	Y-6C
	Dark Wilson's Yellow.....	Color intensification of Wilson's Yellow.....	Nov. 1	Y-8A
10 WEEK	Imp. Ind. Yellow.....	Light golden yellow selection of Ind. Yellow.....	Nov. 5	Y-5C
	Indianapolis Yellow.....	Large lemon yellow incurve.....	Nov. 5	Y-5C
	Indianapolis Gold.....	Large golden yellow incurved standard.....	Nov. 5	Y-6A
	Dark Ind. Yellow.....	Deep lemon yellow.....	Nov. 5	Y-7A
	YGA Yellow Crystal.....	Medium lemon yellow spider.....	Nov. 5	Y-7A
	YGA Golden Crystal.....	Deep golden yellow sport from Snow Crystal.....	Nov. 5	Y-8A
	YGA Capricorn.....	Large decorative standard.....	Nov. 5	Y-7C

JACKSTRAW



FUJII DELAWARE





VARIETIES FOR YEAR-ROUND POTS

YELLOW—Continued

	Variety	Description	Natural Flowering Date	Price Code
10 WEEK	Oregon Trail	Large light yellow semi-incurve	Nov. 5	Y-8A
	YGA Luminary	Intermediate yellow disbud, decorative form	Nov. 5	Y-7D
	YGA Jackstraw	Large deep yellow feathered decorative	Nov. 5	Y-8A
	Yellow Prince	Intermediate yellow incurve	Nov. 5	Y-8A
	Yellow Leighton	Large lemon yellow delicate spider	Nov. 6	Y-8A
	Yellow Delaware	Large golden yellow incurve	Nov. 8	Y-5C
	Gol. Yel. Princess Anne	Large sulfur yellow decorative standard	Nov. 10	Y-6C
	Cream Yel. Princess Anne	Large cream yellow decorative standard	Nov. 10	Y-7A
	Yellow Pacesetter	Lemon yellow single	Nov. 10	Y-8A
	YGA Scepter	Large deep golden yellow decorative	Nov. 10	Y-6A
	YGA Yellow Deluxe	Bright clear lemon yellow	Nov. 10	Y-8A
11 WEEK	YGA Splurge (June '61)	Large, rich amber yellow decorative	Nov. 15	Y-8A
	YGA Achievement	(June '61) Very large lemon yellow incurve	Nov. 20	Y-8A
	Bonnaillon Deluxe	Intermediate deep lemon incurve	Nov. 20	Y-5C

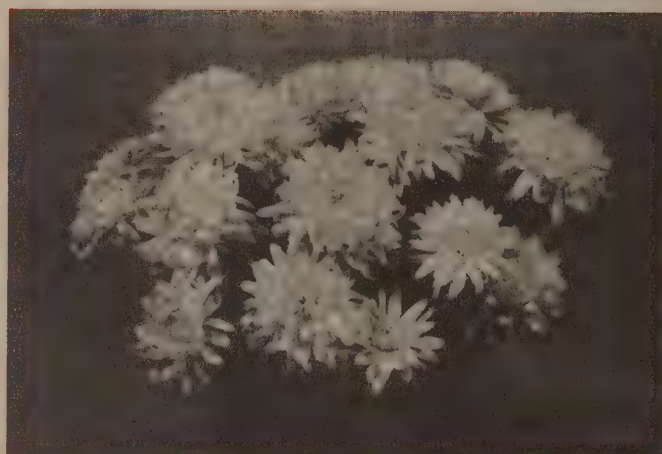
BRONZE & RED

9 WEEK	Resolute	Large reddish bronze pompon	Oct. 25	Y-8A
	Mrs. Palmero	Medium maroon red semi-incurved standard	Oct. 28	Y-8A
	Bronze Palmero	Medium coral bronze semi-incurve	Oct. 28	Y-8A
	Alex Colson	Large vivid bronze decorative	Nov. 1	Y-8A
	Royal Bronze	Intense bronze decorative. Pot disbud	Nov. 1	Y-8A
10 WEEK	Apricot Princess Anne	(June '61) Large decorative standard	Nov. 10	Y-7A
	Indianapolis Bronze	Large bronze incurve	Nov. 5	Y-5C
	Dk. Ind. Bronze	Dark reddish bronze sport	Nov. 5	Y-5C
	Bronze Prince	Intermediate bronze incurve	Nov. 5	Y-8A
	Red Star	Large red to reddish bronze decorative	Nov. 5	Y-6D
	Vulcan	Large crimson red decorative	Nov. 5	Y-8A
	Sandroek	Small light bronze formal standard	Nov. 5	Y-8A
	Delaware	Large reddish bronze semi-incurved standard	Nov. 8	Y-5C
	Incurved Delaware	Large reddish bronze tightly incurved standard	Nov. 8	Y-7B
	Fujii Delaware	Large Fujii formed standard	Nov. 8	Y-7B
	Golden Gate	Large golden bronze decorative standard	Nov. 10	Y-6C
	Bronze Princess Anne	Large amber bronze decorative standard	Nov. 10	Y-6C
	Working Scarlet	Large brilliant scarlet bronze decorative standard	Nov. 10	Y-7A
	YGA Bronze Deluxe	Large light bronze sport of Pink Deluxe	Nov. 10	Y-8A
	Copperhead	Large coppery bronze decorative	Nov. 10	Y-7A
11 WEEK	Red Humdinger	Burgundy red sport of Humdinger	Nov. 11	Y-7B
	No. 2 Red Humdinger	Color intensification on Red Humdinger	Nov. 11	Y-7B
	Harmony	Medium golden bronze semi-incurved standard	Nov. 15	Y-8A
	Tan Vedova	Light bronze sport of Vedova	Nov. 15	Y-8A
	Valentine	Large red decorative	Nov. 20	Y-7A
	Calvert's Gold	Intermediate golden bronze semi-incurve standard	Nov. 20	Y-7A
	Calvert's Orange	Large semi-incurve sport of Calvert's Gold	Nov. 20	Y-8A
	Clipper	Large bronze red incurve, light bronze reverse	Nov. 20	Y-8A

SPLURGE



ACHIEVEMENT





VARIETIES FOR YEAR-ROUND POTS

PINK

	Variety	Description	Natural Flowering Date	Price Code
9 WEEK	Perle Angevine.....	Tightly incurved lavender pink standard.....	Nov. 1	Y-8A
	YGA Handsome.....	Intermediate lavender pink decorative pompon.....	Nov. 1	Y-8A
	YGA Glamour.....	Intermediate lavender pink formal pompon.....	Nov. 1	Y-8A
	Blue Ribbon.....	Small bright lavender pink incurve.....	Nov. 1	Y-6B
	Dark Ribbon.....	Small deep pink incurved sport of Blue Ribbon.....	Nov. 1	Y-7A
	Pink Ribbon.....	Light lavender pink incurved standard.....	Nov. 1	Y-8A
	Bridesmaid.....	Large light lavender pink spider.....	Nov. 1	Y-6B
	Queen of Pinks.....	Small pink incurve.....	Nov. 1	Y-7C
10 WEEK	Loubens.....	Large deep lavender pink incurved standard.....	Nov. 5	Y-7D
	Indianapolis Pink.....	Large pink incurve.....	Nov. 5	Y-5C
	J. W. Prince.....	Intermediate lavender pink incurve.....	Nov. 5	Y-8A
	YGA Mermaid.....	Intermediate lavender pink pompon.....	Nov. 5	Y-5D
	Portrait.....	Large lavender pink pompon.....	Nov. 8	Y-6A
	Pink Portrait.....	Light pink pompon sport of Portrait.....	Nov. 8	Y-6C
	Profile.....	Large lively deep pink pompon.....	Nov. 8	Y-8A
	Criterion.....	Large pink decorative.....	Nov. 8	Y-6C
	YGA Caress.....	Large pink decorative.....	Nov. 10	Y-8A
	Princess Anne.....	Large salmon pink decorative standard.....	Nov. 10	Y-6C
	YGA Frolic.....	Intermediate bright lavender pink pompon.....	Nov. 10	Y-6C
	Personality.....	Large luminous-pink incurved pompon.....	Nov. 10	Y-6B
	Humdinger.....	Large luminous violet purple formal pompon.....	Nov. 10	Y-6C
	YGA Pink Deluxe.....	Medium to large lavender pink disbud.....	Nov. 10	Y-6B
	Rosamund.....	Medium rose pink semi-incurved standard.....	Nov. 10	Y-8A
11 WEEK	YGA Heather.....	Medium luminous-pink anemone.....	Nov. 15	Y-8A
	YGA Charm.....	Intermediate bright pink anemone.....	Nov. 15	Y-8A
	YGA Blue Ridge.....	Huge pink decorative.....	Nov. 15	Y-8A
	Vedova.....	Extra large pastel lavender pink anemone.....	Nov. 15	Y-7A
	Calvert's Pink.....	Intermediate orchid pink incurve.....	Nov. 17	Y-7C
	Venoya.....	Extra large lavender pink anemone.....	Nov. 22	Y-7A
	Illini Formal.....	Intermediate lavender pink pompon.....	Nov. 23	Y-8A

BLUE RIDGE



CARESS



PRINCESS ANNE



POITEVINE SUPREME



NEW GARDEN LISTINGS FOR 1961

* Useful as a Garden Pot Plant

Ali Baba

Brilliantly handsome purple pompon with many 1½" blooms fine for garden cutting. Medium habit of growth. **October 5.** Price.....8A

Bronze Gremlin

Perky little 1½" pompons of deep walnut bronze with a deep mahogany eye. **September 15.** Price.....8A

Campaigner

Beautiful large 3" cactus of bronze gold that deepens after frost to nearly orange. Upright flaring growth of medium height. **September 22.** Price.....8A

Cortis Rice

Large 5" buttercup yellow. A good early cut flower garden mum. **September 10.** Price.....8A

Crystal

Pure white pompon with showy wide petals and long straight stems. Fine for cutting. **September 27.** Price.....8A

*Dan Foley

Compact orange scarlet cushion. Of medium height. Also an excellent spring pot variety. **October 1.** Price.....8A

Flaming Pillar

Brilliant pyramid of Christmas red flowers. Flowers 2½" across. **October 15.** Price.....8A

Gleam

Vivid golden yellow pompon. **Mid September to frost.** Price.....7B

Milan

Beautiful deep golden yellow blooms fully 3" across on 15" mounded plants. Sturdy habit and profuse buds supported on excellent stems. **October 1.** Price.....8A

Minnbronze

A deep bronze sport of Minnpink. **September 25.** Price.....8A

Moonlight Spoon

A large early soft yellow spoon that grows in a bushy clump. **September 20.** Price.....8A

Prairie Moon

Large double creamy white with excellent substance and strong vigorous plant habit. **September 16.** Price....8A

Premier

Bright yellow 3 to 3½" fully double ball shaped flowers supported by sturdy stems. **Mid September.** Price.....8A

*Ruby Mound

New wiry bright deep ruby red with cushion type growth. Flowers resist fading. A fine new red cushion that rivals Lipstick when grown as a spring pot plant. **September 22.** Price.....8A

Searchlight

Tangerine, bronze and orange blooms. Medium in height and abundant in production. Flowering **September 28.** Price.....8A

Sparkling

3" decorative of soft rose geranium pink lightly centered with gold. Well formed blooms on stocky medium height plants. **October 1.** Price.....8A

Tonka

A large flowering deep yellow fully double decorative. **September 10.** Price.....8A

SPARKLING



MOONLIGHT SPOON





GARDEN VARIETIES

SYMBOLS—(L) Large—(D) Decorative—(P) Pompon—(C) Cushion—(S) Single—(B) Button
(C-F) Carnation Flowered—(Sp) Spoon.

* Recommended for spring pot plants pinched and short day treatment same day.

D Varieties recommended as better when disbudded.

Varieties in bold face are new for 1961.

VARIETY	SIZE AND TYPE	COLOR	HEIGHT	MATURES	PRICE
WHITE					
Osage	(CD)	White	Short	Sept. 5	7B
Candlelight	(D)	White	Med.	Sept. 5	7A
Paper White	(D)	White	Med.	Sept. 10	6C
* Crystal Maid	(DP)	Cream	Short	Sept. 12	7A
Nanook	(CD)	Cream	Short	Sept. 14	7D
* Chris. Columbus	(LDP)	Cream	Tall	Sept. 15	8A
Wh. Cushion	(C)	White	Short	Sept. 15	7A
* Gloria	(DP)	White	Med.	Sept. 15	8A
Powderpuff	(C)	White	Short	Sept. 15	6C
Polar Ice	(D)	White	Med.	Sept. 15	6D
* Wh. Bounty	(BP)	Cream	Tall	Sept. 15	6C
D Wh. Tower	(LP)	Cream	Tall	Sept. 15	6D
Prairie Moon	(L)	Cream	Tall	Sept. 16	8A
* Princess Kay	(D)	White	Med.	Sept. 20	7D
Albaflora	(LD)	White	Med.	Sept. 20	7D
Benora	(C)	White	Short	Sept. 20	7D
* Granny Lehman	(D)	White	Med.	Sept. 20	7D
White Sail	(D)	White	Med.	Sept. 23	7C
Wh. Wonder	(LP)	Ivory	Med.	Sept. 25	6D
Jessamine Williams	(SP)	White	Med.	Sept. 25	8A
* Shalimar (H)	(LD)	White	Med.	Sept. 25	6D
Quicksilver (H)	(LD)	Cream	Med.	Sept. 25	8A
Wh. Rice	(LP)	White	Short	Sept. 25	6D
* Ostosa	(CP)	White	Short	Sept. 25	7C
Wh. Cloud	(D)	White	Tall	Sept. 25	7A
Raggedy Ann	(LC)	White	Med.	Sept. 26	7D
Crystal	(P)	White	Tall	Sept. 27	7D
* Judy	(BP)	White	Short	Sept. 27	7D
Mount Hood	(LD)	White	Med.	Sept. 28	7D
Candleglow	(D)	White	Tall	Sept. 28	7B
North Star	(S)	White	Med.	Sept. 28	6D
* Pepita	(SBP)	White	Med.	Sept. 28	6D
* Larry	(P)	White	Short	Oct. 1	7D
* Corsage Cushion	(C)	White	Short	Oct. 1	7D
Henry Etts	(SP)	White	Tall	Oct. 1	7D
* Gardenia	(LD)	White	Med.	Oct. 1	8A
Beth Russel	(LD)	Cream	Med.	Oct. 1	7D
Grace Bradshaw	(LD)	White	Tall	Oct. 1	8A
* Kansas	(D)	White	Med.	Oct. 5	7D
* Mitsie	(P)	White	Med.	Oct. 5	7D
Limelight	(D)	White	Med.	Oct. 6	7A
* Medusa	(D)	White	Med.	Oct. 5	8A
Hadley	(D)	Cream	Tall	Oct. 5	8A
* Lyric	(S)	White	Short	Oct. 5	7A
Avalanche	(LD)	White	Tall	Oct. 5	7D
Horizon	(D)	White	Med.	Oct. 5	6D
* Classic	(P)	White	Tall	Oct. 10	8A
* Minnesota	(LP)	White	Med.	Oct. 10	7C
* Maestro	(P)	Cream	Short	Oct. 10	7D
* Albion	(LD)	White	Med.	Oct. 10	7B
Wh. Masquerade	(B)	White	Med.	Oct. 10	7D
Wh. Spoon	(SP)	White	Med.	Oct. 10	6D
* Silverplate	(D)	White	Med.	Oct. 12	8A
* Elmira	(LD)	Cream	Med.	Oct. 12	8A
* Michigan State	(LD)	White	Med.	Oct. 14	7C
Spartan	(LD)	White	Tall	Oct. 15	8A
Pilgrim	(P)	White	Med.	Oct. 15	7C
Joan-Ette	(SP)	Ivory	Short	Oct. 15	8A
Irene	(B)	White	Med.	Oct. 15	7D
Blizzard	(P)	White	Med.	Oct. 15	7B



GARDEN VARIETIES

VARIETY	SIZE AND TYPE	COLOR	HEIGHT	MATURES	PRICE
YELLOW					
Reverence	(LD)	Chamois	Short	Sept. 1	7A
* Early Gold	(P)	Golden	Short	Sept. 5	7C
Golden Hours	(P)	Chrome Yel.	Med.	Sept. 8	7A
Cortis Rice	(L)	Buttercup Yellow	Tall	Sept. 10	8A
Tonka	(LD)	Deep Yellow	Tall	Sept. 10	8A
John Milbrath	(LD)	Brt. Yellow	Med.	Sept. 10	7D
Gold Button	(BP)	Golden	Med.	Sept. 10	7A
Delight (H)	(P)	Golden	Med.	Sept. 12	8A
Genista	(D)	Canary Yel.	Med.	Sept. 12	7A
Gleam	(P)	Golden Yel.	Med.	Sept. 15	7B
Premier	(LD)	Brt. Yellow	Med.	Sept. 15	8A
Pathfinder	(D)	Deep Lemon	Med.	Sept. 15	7A
* Pomponette	(P)	Orange	Short	Sept. 15	6C
Yel. Cushion	(D)	Light Yel.	Short	Sept. 15	7B
* Yel. Chris. Columbus	(LD)	Brt. Lemon	Med.	Sept. 15	8A
* Early Yellow	(B)	Deep Lemon	Short	Sept. 15	6C
Golden Carpet	(C)	Golden	Short	Sept. 15	7A
Glendale	(P)	Yellow	Med.	Sept. 15	8A
* D Ming	(P)	Golden	Med.	Sept. 18	7A
Moonlight Spoon	(Sp)	Soft Yellow	Med.	Sept. 20	8A
Golden Fantasy	(CF)	Golden	Med.	Sept. 20	8A
* Sept. Sunshine	(S)	Brt. Lemon	Med.	Sept. 20	6C
* Aglow	(P)	Orange-Yel.	Med.	Sept. 20	7D
Sundance	(D)	Lemon	Med.	Sept. 20	8A
Real Gold	(LD)	Deep Golden	Med.	Sept. 20	7A
Canary Wonder	(LP)	Canary Yel.	Med.	Sept. 25	6D
Golden Cushion	(C)	Golden Yellow	Short	Sept. 25	7B
Golden Wonder	(LP)	Golden	Med.	Sept. 25	6D
Charles Nye	(LP)	Deep Lemon	Tall	Sept. 25	7C
Golden Sunset	(LD)	Copper	Med.	Sept. 25	6D
Hilite	(D)	Yellow	Tall	Sept. 25	8A
* Honeycomb	(P)	Honey Yel.	Med.	Sept. 25	7A
Exeter	(D)	Golden	Med.	Sept. 25	7D
* Moonlight	(LD)	Brt. Yellow	Med.	Sept. 25	7D
Lee Powell	(LD)	Chinese Yel.	Tall	Sept. 25	7D
Golden Age	(P)	Golden Yel.	Tall	Sept. 25	8A
Tangerine	(LD)	Deep Orange	Med.	Sept. 25	6D
Butterscotch (H)	(D)	Golden Yel.	Tall	Sept. 26	7D
Astoria	(LD)	Deep Lemon	Med.	Sept. 28	8A
* Marie Hartman	(D)	Canary Yel.	Med.	Sept. 28	7D
Yel. Supreme (H)	(C)	Brt. Lemon	Short	Sept. 28	6C
Milan	(L)	Deep Golden	Tall	Oct. 1	8A
Ruby Breithaupt	(LD)	Primrose Yel.	Med.	Oct. 1	7C
Freya	(LD)	Golden Yel.	Med.	Oct. 1	7A
* King's Ransom	(D)	Golden Yel.	Med.	Oct. 1	8A
Tranquility	(D)	Lemon Yel.	Med.	Oct. 1	7A
* Chiquita	(B)	Deep Lemon	Med.	Oct. 1	7D
Ethel Waters	(L-INC.)	Lt. Lemon	Med.	Oct. 5	8A
Newton	(L-CACTUS)	Golden Yel.	Med.	Oct. 5	7B
* Sudan	(LD)	Yellow	Med.	Oct. 5	8A
Polaris	(LD)	Golden Buff	Tall	Oct. 5	7D
* Illinois	(INC.)	Brt. Golden	Med.	Oct. 5	7C
Yel. Avalanche	(LD)	Lt. Lemon	Tall	Oct. 5	7D
Orion	(LD)	Soft Yellow	Short	Oct. 5	8A
* Yel. Spoon	(SP)	Lt. Yellow	Med.	Oct. 10	8A
Treasure	(P)	Golden Yel.	Tall	Oct. 10	7D
Golden Spoon	(SP)	Golden Yel.	Med.	Oct. 10	6D
Bright Forecast	(P)	Brt. Lemon	Tall	Oct. 10	7C
Yel. Calumet (H)	(P)	Lemon Yel.	Med.	Oct. 10	8A
Arlora	(LD)	Brt. Lemon	Med.	Oct. 10	7A
Michigan	(LD)	Clear Yel.	Med.	Oct. 12	7C
* Sunburst	(L-CACTUS)	Golden Yel.	Med.	Oct. 12	7D
* Gold Lode	(L-INC.)	Brt. Yellow	Med.	Oct. 15	6C
Judith Anderson	(B)	Brt. Lemon	Med.	Oct. 15	6C
Yel. Irene	(B)	Lt. Lemon	Med.	Oct. 15	7D
* Ohio State (H)	(CACTUS)	Golden Yel.	Med.	Oct. 15	8A
Sarasota	(P)	Brt. Lemon	Med.	Oct. 15	7A
* Iowa	(INC.)	Brt. Lemon	Med.	Oct. 15	7C
Peking	(D)	Primrose Yellow	Short	Oct. 15	8A



GARDEN VARIETIES

VARIETY	SIZE AND TYPE	COLOR	HEIGHT	MATURES	PRICE
BRONZE & RED					
Vulcan (H)	(D)	Dark Red	Short	Aug. 24	7D
Tecumseh	(C)	Brick Red	Short	Sept. 2	8A
Glow Worm	(C)	Or. Scarlet	Short	Sept. 8	7A
Early Harvest	(C)	Mah. Orange	Short	Sept. 8	7C
Harbinger	(LD)	Golden Br.	Short	Sept. 8	7B
* W. P. Snyder	(P)	Apricot Or.	Med.	Sept. 10	7C
Autumn Song	(D)	Wine Rose	Med.	Sept. 10	7A
Geo. Luxton	(LD)	Lt. Bronze	Med.	Sept. 12	7A
Bronze Gremlin	(P)	Deep Bronze	Short	Sept. 15	8A
Br. Pomponette	(P)	Golden Br.	Short	Sept. 15	7B
Early Crimson	(D)	Br. Crimson	Med.	Sept. 15	6C
Apache	(LD)	Red & Gold	Med.	Sept. 15	7A
Early Bronze	(B)	Orange Br.	Short	Sept. 15	6C
Red Gold	(B)	Red & Gold	Med.	Sept. 15	6D
Dk. Red Gold	(B)	Dark Red	Med.	Sept. 15	6D
New Marj. Mills	(LP)	Ruby	Short	Sept. 15	7D
Flamboyant	(D)	Orange Br.	Med.	Sept. 15	7A
Early Kathleen	(D)	Coppery Br.	Med.	Sept. 15	7A
Companion	(D)	Golden Br.	Med.	Sept. 15	7B
Autumn Beauty	(D)	Chestnut Red	Med.	Sept. 15	7A
Dandy (H)	(D)	Reddish Br.	Med.	Sept. 16	6C
Sept. Bronze	(B)	Golden Br.	Med.	Sept. 20	6C
* Toronto	(C)	Bronze	Short	Sept. 20	8A
Mesabi	(P)	Rust Bronze	Short	Sept. 20	8A
* Bronze Queen (H)	(C)	Copper Br.	Short	Sept. 20	6D
Abundance	(D)	Golden Br.	Med.	Sept. 20	7D
Red Glow	(P)	Dark Red	Med.	Sept. 20	6D
* Orsona	(P)	Reddish Br.	Med.	Sept. 20	7A
Scarlet Crimson	(D)	Bright Red	Med.	Sept. 20	6D
Mme. Cadillac	(LP)	Raspberry	Short	Sept. 20	7A
Campaigner	(Cactus)	Bronze Gold	Med.	Sept. 22	8A
* Ruby Mound	(C)	Ruby Red	Short	Sept. 22	8A
Bronze Giant	(LD)	Bronze	Tall	Sept. 22	7D
Minnbronze	(C)	Deep Bronze	Short	Sept. 22	8A
Rouge Cushion	(C)	Bright Red	Short	Sept. 25	7B
Br. Wonder	(P)	Bronze	Med.	Sept. 25	7A
Crown Jewell	(D)	Bright Red	Short	Sept. 25	7A
Champ. Cushion	(C)	Deep Bronze	Short	Sept. 25	7D
Comd. Cushion	(C)	Red	Short	Sept. 25	7D
Mahogany Cushion	(C)	Red	Short	Sept. 25	7D
Elite Cushion	(C)	Salmon Br.	Short	Sept. 25	6C
Football Bronze	(D)	Bronze	Tall	Sept. 25	7A
* Lawrence Blaney	(D)	Orange Red	Med.	Sept. 25	7D
Mojave Gold	(LD)	Golden Br.	Med.	Sept. 26	7C
Searchlight	(P)	Tangerine	Med.	Sept. 28	8A
Dark Knight	(D)	Deep Red	Med.	Sept. 28	7D
Mikado	(LD Cactus)	Red	Tall	Sept. 28	7D
* Remembrance	(D)	Dark Carmine	Med.	Sept. 28	8A
Lipstick	(C)	Ruby Orange	Short	Sept. 28	8A
Kathleen Lehman	(LD)	Orange Br.	Med.	Sept. 28	7A
Ruth Scott	(D)	Golden Br.	Tall	Sept. 28	7D
Admiration	(D)	Salmon	Med.	Sept. 28	6C
* Dan Foley	(C)	Or. Scarlet	Med.	Oct. 1	7D
* Morocco	(C)	Reddish Br.	Short	Oct. 1	7C
* Caprice	(LD)	Apricot Br.	Med.	Oct. 1	8A
* Iron Mountain	(P)	Deep Red	Med.	Oct. 1	6D
Jubilee (H)	(P)	Crimson Red	Med.	Oct. 1	7A
Red Riding Hood	(D)	Bright Red	Med.	Oct. 1	7A
Sam Williston	(C)	Deep Red	Short	Oct. 1	6D
Leshara	(D)	Mulberry	Med.	Oct. 1	6C
Bonfire	(D)	Bright Red	Med.	Oct. 1	7B
* Red Mischief	(C)	Deep Red	Short	Oct. 1	8A
Royalist	(P)	Ox-Blood	Med.	Oct. 1	7D
Fire Engine	(S)	Flaming Red	Med.	Oct. 1	6C
Vintage	(P)	Claret Red	Med.	Oct. 1	7D
Nobility	(D)	Deep Red	Med.	Oct. 4	7B
Card. Spoon	(SP)	Red Bronze	Med.	Oct. 5	7B
Firecracker	(D)	Mah. Bronze	Tall	Oct. 5	7A
* Sept. Cheer	(S)	Cherry Red	Med.	Oct. 5	6D
Burgundy	(LP)	Wine Red	Tall	Oct. 5	6C
John Furst	(D)	Orange Br.	Tall	Oct. 5	7D



GARDEN VARIETIES

VARIETY	SIZE AND TYPE	COLOR	HEIGHT	MATURES	PRICE
BRONZE & RED—Continued					
* Red Velvet	(LD)	Dk. Crimson	Med.	Oct. 5	7D
* Mona	(P)	Rust Bronze	Med.	Oct. 5	7D
Indian Red	(D)	Rust	Med.	Oct. 5	7A
Courageous	(D)	Ruby Red	Med.	Oct. 5	6C
* Mrs. Dupont	(LD)	Coral Buff	Tall	Oct. 5	7D
Monterey	(L-Inc.)	Bril. Orange	Tall	Oct. 8	8A
Araby	(D)	Crimson	Tall	Oct. 8	8A
Gladiator	(LD)	Orange Red	Med.	Oct. 10	7A
* D Calumet (H)	(LD)	Apricot	Med.	Oct. 10	7C
Nina Rebman	(P)	Dark Red	Med.	Oct. 10	7D
Dk. Calumet (H)	(D)	Bronze	Med.	Oct. 10	7D
Remember Me	(SP)	Red & Bronze	Tall	Oct. 10	7B
* Dolli-Ette	(SP)	Golden Br.	Med.	Oct. 10	8A
Huntsman	(LD)	Scarlet Or.	Tall	Oct. 10	6D
Carnival	(P)	Burnt Orange	Med.	Oct. 10	8A
Carmine Queen	(P)	Carmine Red	Tall	Oct. 10	8A
* Indiana	(Cactus)	Bronze	Med.	Oct. 10	7C
Admiral	(P)	Dark Red	Med.	Oct. 12	7A
* Purdue (H)	(Inc.)	Bronze	Med.	Oct. 12	7C
* James Stewart	(P)	Apricot Gold	Tall	Oct. 14	7D
Flaming Pillar	(L)	Brilliant Red	Tall	Oct. 14	8A
* Radiance	(D)	Red	Med.	Oct. 15	8A
Cheyenne	(LD)	Bright Red	Short	Oct. 15	8A
* Majestic	(Inc.)	Bronze	Med.	Oct. 15	8A
Resolute	(D)	Bright Red	Med.	Oct. 15	8A
Wisconsin	(Inc.)	Apricot Br.	Med.	Oct. 15	7C
Rajah	(S)	Scarlet Red	Tall	Oct. 15	8A
Helma	(D)	Rich Red	Med.	Oct. 15	7B
PINK & LAVENDER					
Wenonah	(P)	Soft Lavender	Med.	Aug. 24	7D
Gladness	(DP)	China Rose	Short	Aug. 28	7A
Cecil Beed	(D)	Deep Lav.	Med.	Sept. 1	6C
Salmon Precose	(LD)	Sal. Pink	Short	Sept. 1	7B
Amelia	(C)	Lav. Pink	Short	Sept. 5	6C
Dean Kay	(C)	Shell Pink	Short	Sept. 5	6C
Purple Star	(DP)	Bril. Purple	Med.	Sept. 5	7B
* Joan Helen	(D)	Dk. Purple	Med.	Sept. 10	6C
Nye's Favorite	(LD)	Lavender	Med.	Sept. 10	6D
* Orchid Helen	(D)	Orchid Lav.	Med.	Sept. 10	7A
Princess (H)	(D)	Peach to Rose Pink	Med.	Sept. 15	7D
Royal Robe	(D)	Dk. Purple	Med.	Sept. 15	7A
Tensleep	(C)	Rose Pink	Med.	Sept. 15	8A
Chippewa	(D)	Bril. Purple	Med.	Sept. 15	6D
* Purple Spoon	(SP)	Soft Purple	Med.	Sept. 20	7A
* Minnpink	(C)	Rose Pink	Short	Sept. 20	8A
* Purple Waters	(D)	Deep Purple	Med.	Sept. 20	8A
Minnehaha	(C)	Rosy Pink	Short	Sept. 20	8A
* Alert	(LD)	Dark Purple	Med.	Sept. 20	8A
* Blanche Litwiller	(LP)	Lav. Pink	Med.	Sept. 23	7C
Pink Quill	(LD)	Shell Pink	Med.	Sept. 25	7C
Olive Longland	(D)	Salmon Pink	Med.	Sept. 25	6C
Evangeline	(LD)	Flesh Pink	Tall	Sept. 25	7A
* Jeweltone	(P)	Rose Pink	Short	Sept. 25	7A
Lady's Choice	(LD)	Ivory Pink	Med.	Sept. 25	7A
* Reflection	(D)	Rosy Lav.	Med.	Sept. 25	7A
* Petrisian Rose	(P)	Lav. Rose	Med.	Sept. 25	6D
* Cecelia	(D)	Purple	Short	Sept. 25	8A
Imp. Early Wonder	(P)	Lav. Pink	Med.	Sept. 25	6D
* Spellbound	(D)	Bril. Lavender	Med.	Sept. 25	8A
Capt. J. Smith	(C)	Lav. Pink	Short	Sept. 25	6C
Evelyn Devaney	(D)	Shell Pink	Med.	Sept. 25	7A
Purple Cushion	(C)	Deep Purple	Med.	Sept. 25	6C
* Major Cushion	(D)	Lavender	Short	Sept. 25	7D
Coquette	(C)	Rosy Pink	Short	Sept. 25	7A
* Pink Spoon Cushion	(SP)	Lav. Pink	Short	Sept. 26	7D
Loveliness	(SP)	Carmine Pink	Med.	Sept. 26	7D
* Purple Dusk	(C)	Lt. Purple	Med.	Sept. 26	7D
Edna Rowley	(B)	Lav. Pink	Med.	Sept. 26	7C



GARDEN VARIETIES

VARIETY	SIZE AND TYPE	COLOR	HEIGHT	MATURES	PRICE
PINK & LAVENDER—Continued					
Betty	(D)	Pink Rose	Tall	Sept. 28	6C
* Twinkle	(C)	Deep Rose	Med.	Sept. 28	6C
Pat Lehman	(D)	Peach Pink	Tall	Sept. 28	7A
Stylish	(Cactus)	Old Rose	Med.	Sept. 28	7C
Champagne	(D)	Shell Pink	Tall	Sept. 28	7D
Artist's Delight	(D)	Coral Pink	Med.	Sept. 29	7C
Sparkling	(LD)	Rose Pink	Med.	Oct. 1	8A
Lady Fair	(Cactus)	Orch. Pink	Med.	Oct. 1	7D
Old Lavender	(LD)	Brt. Lavender	Med.	Oct. 1	7B
Helen Bogue	(LD)	Rose Purple	Tall	Oct. 1	7C
* Mischief	(S)	Purple	Short	Oct. 1	8A
Ali Baba	(P)	Purple	Med.	Oct. 5	8A
Northern Queen	(LD)	Rose Pink	Med.	Oct. 5	7A
Josephine Ferris	(P)	Pink	Med.	Oct. 5	7D
* Lavender Lady	(D)	Lavender	Tall	Oct. 5	7A
* Ann Ladygo	(C)	Med. Pink	Short	Oct. 5	7B
Betty Etts	(Sp)	Orchid Pink	Med.	Oct. 10	7D
Tremania	(LD)	Coral Peach	Tall	Oct. 10	7D
* Orchid Spoon	(Sp)	Orchid	Med.	Oct. 10	6D
Rose Spoon	(Sp)	Rose Pink	Med.	Oct. 10	6D
Lassie	(LD)	Deep Pink	Med.	Oct. 10	7A
* Melrose	(LD)	Peach Pink	Tall	Oct. 10	7D
* Masquerade	(B)	Lavender	Med.	Oct. 10	6D
* Joybringer	(D)	Lav. Rose	Short	Oct. 10	8A
* Accolade	(P)	Lav. Pink	Tall	Oct. 12	7C
Allegro	(C)	Shrimp Pink	Med.	Oct. 12	7A
Evelyn Garren	(L-Inc.)	Rose & Gold	Med.	Oct. 12	7D
* Fuchsia Fairy	(D)	Light Pink	Short	Oct. 14	8A
No. 2 Fuchsia Fairy	(D)	Deeper Pink Sport	Short	Oct. 14	8A
Cupid	(D)	Pink	Med.	Oct. 15	7D
* Jewell	(B)	Lavender	Med.	Oct. 15	7D
Enterprise	(P)	Amaranth Rose	Tall	Oct. 15	7D
Elizabeth Hood	(D)	Lt. Lavender	Med.	Oct. 15	8A
Royal Ette	(Sp)	Lavender Pink	Short	Oct. 15	8A

CHRYSANTHEMUM CUTTINGS PRICE LIST

Effective January 1, 1961

The list price for each variety is indicated by a price symbol that appears with the variety name in the flowering program charts.

SYMBOL	50 ONLY	PRICE PER 100 CUTTINGS			
		100-250	300-450	500-950	1000 & UP
5C	3.25	6.25	6.00	5.75	5.50
5D	3.38	6.50	6.25	6.00	5.75
6A	3.50	6.75	6.50	6.25	6.00
6B	3.63	7.00	6.75	6.50	6.25
6C	3.75	7.25	7.00	6.75	6.50
6D	3.88	7.50	7.25	7.00	6.75
7A	4.00	7.75	7.50	7.25	7.00
7B	4.13	8.00	7.75	7.50	7.25
7C	4.25	8.25	8.00	7.75	7.50
7D	4.38	8.50	8.25	8.00	7.75
8A	4.50	8.75	8.50	8.25	8.00

GARDEN VARIETIES COLLECTIONS

COLLECTION PRICES PER 100

300-450	500-950	1000 & UP
6.25	6.00	5.75

For growers who are not familiar with Garden Varieties, but who wish a well balanced assortment, we offer the following collections which include the better varieties for each specific purpose.

COLLECTION No. 1

Taller varieties for cut flowers.

COLLECTION No. 2

Varieties for bedding or borders.

COLLECTION No. 3

50% for Cut Flowers.
50% for Bedding or Borders.

COLLECTION No. 4

Varieties suitable for Easter, Mother's Day or Memorial Day pots.

COLLECTION No. 5

Cushion varieties only.

COLLECTION No. 6

Greenhouse Standards.

COLLECTION No. 7

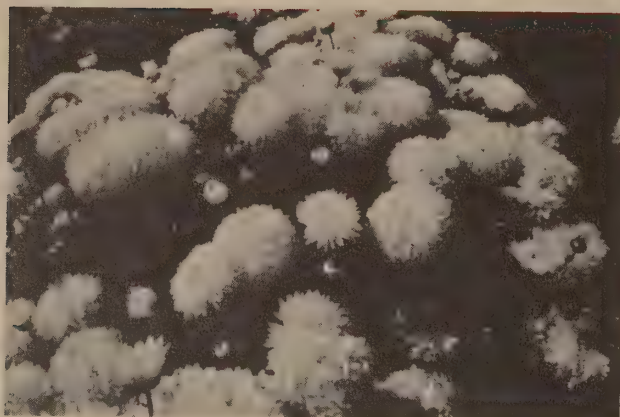
Greenhouse Pompons.

COLLECTION No. 8

Greenhouse Pot Plant varieties.

ABOVE COLLECTION PRICES APPLY TO GARDEN VARIETIES ONLY PAGES 125-129

PREMIER



CAMPAIGNER



INSECTICIDES

- Aramite 15W**—Used to control Red Spider Mites.
4 lb. bag \$3.25 Case—12 x 4 lb. bags \$35.00
- Aramite Liquid 2E**—Red Spider Mite control.
1 gallon \$13.00
- Chlorobenzilate 25W**—For control of Spider Mites.
4 lb. bag \$5.25 Case—12 x 4 lb. bags \$53.50
- D. D. T. 50W**—General purpose. For most leaf eating, chewing insects, soil pests, thrips, white flies.
4 lb. bag \$1.55 Case—12 x 4 lb. bags \$16.50
- Endrin 1.6 lb. Liquid**—Excellent for control of Cyclamen Mite, Aphids, Thrips, etc.
1 gallon \$12.50 4 gallons \$10.40 per gal.
- Kelthane W**—For control of both Cyclamen and Red Spider Mites.
4 lb. bag \$5.50 Case—12 x 4 lb. bags \$60.00
- Kelthane 18.5 Liquid**—Red Spider Mite control.
1 gal. \$11.00 Case—4 x 1 gal. cans \$10.25 per gal.
- Lindane 25W**—For Aphids, Thrips, Leafhoppers, Spittle-bugs, Symphylids.
4 lb. bag \$7.00 Case—12 x 4 lb. bags \$78.00
- Lindane 1½%**—50 lb. bag \$11.75.
- Malathion 25W**—For Spider Mites, Aphids, Thrip, Scales, Leafhoppers and Rollers, Mealy Bugs, Caterpillars, Beetles, White Flies and Tarnished plant bugs.
4 lb. bag \$2.75 Case—12 x 4 lb. bags \$28.70
- Malathion Liquid 5-E**—1 gallon \$11.50.
- Nico Fume Liquid**—To control Aphids, Thrips, Chrysanthemum Leaf Minor and Marguerite Fly.
1 gallon can \$16.25
- Parathion 15W**—To control Aphids, Spider Mites, Caterpillars, Leaf Rollers, Thrips, Beetles, Mealy Bugs, White Flies and Rose Midge.
3 lb. bag \$1.75 Case—16 x 3 lb. bags \$25.00
- P-40 (2% Sodium Selenate)**—For chewing and sucking insects on plants other than edible crops. Food crops not to be grown in treated area for 12 months.
25 lbs. \$12.50 50 lbs. \$22.50 100 lbs. \$40.00
- Sodium Selenate (Pure)**—For control of Aphids, Red Spider, Cyclamen Mites and some Nematode.
4 oz. \$4.00 1 lb. \$12.50
- Slugit**—Liquid Metaldehyde solution for control of snails and slugs.
1 gallon \$12.00
- Systox**—A systematic insecticide for control of Foliar Nematode, Aphids and Spider Mites. (For soil application only.)
1 gallon \$30.75
- Tedion 25**—For control of Red Spider Mites.
2 lb. bag \$4.00 Case—12 x 2 lb. bags \$44.75
- Tedion 90**—For resistant Spider Mites. (Can combine with Aramite for highly resistant mites.)
1 lb. bag \$7.20 Case—12 x 1 lb. bags \$78.00
- Thiodan Emulsion**—For control of Aphids, White Fly and Cyclamen Mites.
1 gallon \$10.00
- Thiodan 50W**
2 lb. bag \$4.75 Case—12 x 2 lb. bags \$52.00
- Trithion 25W**—Two spotted Spider Mites, Monterey Pine Aphids, Rose Aphids, and soft scale insects.
5 lb. bag \$5.45
- Vapatone XX Emulsive**—For control of Aphids, Thrips, Red Spider and Leaf Hopper Nymphs.
1 gallon \$12.00
- Spreader Sticker**—For use with Agricultural Chemicals.
1 gallon \$7.95

FUMIGATORS

- Fulex Parathion Fumigator**—For Red Spider, Aphids and Thrip. Carton—24 cans
2,000 cu. ft. \$11.50 10,000 cu. ft. \$17.00
5,000 cu. ft. \$14.50 20,000 cu. ft. \$26.00
- Fulex Aphid Smoke Fumigator**—For Aphid and adult White Fly. Carton—24 cans
2,000 cu. ft. \$11.00 10,000 cu. ft. \$17.00
5,000 cu. ft. \$14.00 20,000 cu. ft. \$25.00
- Fulex Spider Mite Fumigator**—For Red Spider including some parathion resistant strains on Carnations, Chrysanthemums and Snaps. Carton—24 cans
2,000 cu. ft. \$11.50 10,000 cu. ft. \$19.00
5,000 cu. ft. \$14.50 20,000 cu. ft. \$31.00
- Fulex Nicotine Fumigator**. Carton—12 cans
10,000 cu. ft. \$8.50 20,000 cu. ft. \$14.00
- Fulex Tedion Fumigator**. Carton—12 cans
5,000 cu. ft. \$ 9.50 20,000 cu. ft. \$21.00
10,000 cu. ft. \$12.50
- Plant Fume 103**—For control of Spider Mite, Aphid, Thrip.
Carton—36 cans..... 5,000 cu. ft. \$12.00
Carton—12 cans..... 20,000 cu. ft. \$12.00

FUNGICIDES

- A. D. O.**—A drench for controlling damp-off in seed flats. Also effective in controlling the spread of Rhizictonia, Pythium and Fusarium, Stem Rot Diseases.
Pint (treats 1,000 sq. ft.) \$4.95 Quart \$9.50
- Captan**—For Leaf Spot and Botrytis control. Not adequately effective against Rusts, Powdery Mildew, Bacteria. 5 lb. bag \$4.25
- Ferbam**—Controls Fungus Leaf Spots. Not effective against Bacteria or Powdery Mildew.
3 lb. bag \$2.00 Case—12 x 3 lb. bags \$21.60
- Gerox**—For effective control of Fusarium and Bacterial Rot (Black Leg) of Geraniums. Also other rots caused by Rhizictonia Solani, a soil and damp-off Fungus.
150 grams—\$8.00 Post Paid
(Treats approx. 6,000 2¼" pots)
- Pano Drench**—Effective soil drench for prevention of damp-off in seed flats. For use either as a pre- or post-emergence treatment.
4 oz. bottle—\$5.95 Post Paid
16 oz. bottle—\$19.20 Post Paid
- Terrachlor W. P. 75% (PCNB)**—Soil treatment for control of Rhizoctonia and Sclerotium Rotsii.
5 lb. bag \$4.25 Case—10 x 5 lb. bags \$41.00
- Zineb 65W**—To control Rusts, Fungus Leaf Spots, Botrytis Blights. Not effective against bacteria or Powdery Mildews.
3 lb. bag \$2.50 Case—16 x 3 lb. bags \$37.00
- Vapam (Soil Fumigant)**—For controlling weeds, weed seeds, Nematodes, and soil Fungi.
1 gallon \$4.75

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JIFFY POTS

1961

These are now extensively used to hasten programs and smooth out tight situations where a crop may be delayed. The cuttings can be started in a 3" square jiffy preferably and can be pinched in the pot. We caution you to try and bench before the 5th week, as crop may suffer otherwise. Packed 1000 per ctn.

1,000 - 9,000	\$15.50	per 1000
10,000 - 49,000	14.50	" "
50,000 up	13.50	" "
5 cartons up sent prepaid		

BLACK SHADING CLOTH

Black Sheen cloth guaranteed to reduce the light intensity to 2 foot candles or less when shading your early chrysanthemums.

#575—Quality cloth sewn in multiple of 18-inch widths to your specifications.

#258—Extra heavy cloth for longer service sewn in multiples of 18-inch widths to your specifications.

New York Sheen—A good quality cloth strongly sewn. Competitively priced. 36" widths only.

Knight's Black Sheen—Extra heavy cloth in 18" widths to your specifications.

American Black Sheen—Good quality for inside or outside.

Cloth is approximately 36 inches wide unsewn in rolls or sewn to your dimensions in multiples of 18 inches. There is a loss of about 2 inches per yard in width because of shrinkage in preparation and overlapping in sewing. So allow for this in estimating the width of the cloth you need. Here is a chart to help you estimate the width and length of the cloth required to cover different sized benches or beds with wire placed 4 feet above the bench:

For a bench of this width	Use cloth of this width	And add to length for end hangover
3 feet	12 feet	9 feet
3½	12	8½
4	13½	9½
4½	13½	9
5	15	10

→ WHEN ORDERING . . . SPECIFY THE TYPE YOU WANT!

Prices available upon request.

JANUARY

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FLOWER HOLIDAY CALENDAR

YEAR VALENTINE'S DAY EASTER MOTHER'S DAY MEMORIAL DAY SWEETEST DAY THANKSGIVING CHRISTMAS

1961	FEB. 14	APRIL 2	MAY 14	MAY 30	OCT. 21	NOV. 23	DEC. 25
1962	FEB. 14	APRIL 22	MAY 13	MAY 30	OCT. 20	NOV. 22	DEC. 25
1963	FEB. 14	APRIL 14	MAY 12	MAY 30	OCT. 19	NOV. 28	DEC. 25

1962

1963

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